2002

Missouri State of the State Information Technology Report

Missouri Office Of Information Technology

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Office of Information Technology
2002 State of the State IT Report

Executive Summary

The Report

The State of the State IT Report serves as an annual review of the accomplishments, planned projects and accumulated demand experienced by Missouri's information technology community. Originating through legislation introduced in House Bill 5 of the 1999 state legislature, the following section outlines the report's purpose and timeline.

> *Section 5.225. To the Office of Administration: (1999 House Bill 5) For the purpose of funding the Office of Information Technology and an annual status report of information technology projects. The report is to be submitted to the Senate Appropriations Committee Chair and the House Budget Committee Chair by December 31 of each year.*

New this year to the State of the State IT Report is the department profile. At a glance pertinent information is available describing each department, their information technology division, individuals assigned to strategic committees, and hardware/software technologies utilized. This information should prove to be an important resource during the coming year to Missouri's information technology community.

Mission and Goals

The mission of Missouri Information Technology is to support, enable and simplify effective business solutions for state customers so they can take full advantage of government services. (Information Technology Strategic Plan – Fiscal Year 2003)

Goal – Improve delivery, efficiency, and accessibility of government services to the public.

Every department included in this report addresses accomplishments relevant to this particular goal. From a statewide perspective, the new Network Management Consortium will bring efficiencies to Missouri State Government. Missouri's e-government initiative is focused on interacting electronically with citizens, companies, and other governments through a number of services such as providing information,

paying taxes, renewing licenses, etc. via the Internet. A goal of e-government is to provide these services in a cross-agency environment that does not require the citizen to know what department must contacted to conduct business. To find out what citizens are saying about the state's portal and e-government online services go to www.oit.state.mo.us and view "E-Government". The Missouri IT community is currently working on a .GOV URL and e-mail initiative that will bring a consistent and simplified customer focus to statewide electronic communications. Another major area addressed by this goal is the accomplishments during this past year in the area of accessibility standards that will assist the state in how we develop and/or purchase information systems and design web pages accessible to our citizens.

Goal – Increase the ability of government to provide continuous services particularly in times of disaster.

Since the events of 9/11 our world has changed. With that change comes an increased awareness of the security and privacy issues in an electronic environment. Within this past year some of the departments have designated information technology security officers. A few departments have chosen to designate information privacy officers and more privacy officers will be designated during this next year as the Health Insurance Portability and Accountability Act (HIPAA) is implemented. A statewide IT security committee is active with representation from a majority of departments. The state CIO leads the cyber security and business continuity committees for the Missouri Security Council and provides representation to address IT issues on the remaining Missouri Security Council committees. Departments are preparing to work on business continuity plans and will follow that activity by focusing on disaster recovery programs where appropriate. A justice information systems integration project is underway that promises improvements in the quality and speed of decision-making throughout the justice system and will provide for improved performance and service delivery, thus increasing public safety.

Goal – Reduce the burden of delivering business solutions.

The current budget shortage and struggling economy brings an even greater emphasis to this goal. OIT and the departments are exploring the possibilities of non-taxed based funding wherever possible, from sources such as bonds and revenues generated from convenience fees, etc. For the e-government initiative the concept of fees is being explored as a method of funding the required initial infrastructure and the ongoing costs of providing electronic services to citizens. Various methods of reducing system development costs are being utilized by the departments through improved business practices such as training staff to be Missouri-certified project managers, conducting risk assessments, providing project oversight and implementing a Missouri Value Assessment Program (MoVAP) that delivers a consistent budget and cost/benefit methodology for IT projects. Also underway is an enterprise architecture effort to build a statewide infrastructure that is based on a common set of standards used by all departments. The enterprise architecture will result not only in cost savings, but will also contribute to the goals of efficiency, accessibility and continuous service.

Quick Facts

The following statistics are gathered from the individual department/agency reports and profiles included in this document. Please bear in mind not all departments provide an annual report and some of the annual report participants are agencies or divisions of a larger department. An example of this would be the Missouri State Highway Patrol, an annual report participant, who exists as a division of the Department of Public Safety.

Total number of participating departments/agencies 22

Total number of major accomplishments reported 260

Total number of major planned projects reported.....198

Total number reporting an assigned security officer 16

Total number reporting an assigned privacy officer 6

Total number of Missouri certified project managers.....146

Conclusion

Both the accomplishments and the challenges are many within Missouri's information technology community. Every department is attempting to do more with less and maximize their existing resources in order to get the job done. Please review the specific department reports and discover the wide range of information technology projects that ultimately strive to improve Missouri state government for its citizens.

The 2002 State of the State IT Report can be downloaded at www.oit.state.mo.us and select "Reports and Plans". For the first time this report is being distributed via the Internet linked to the Office of Information Technology website. This electronic distribution will result in a savings of approximately $550 as compared with the previous distribution method of printed materials.

Office of Information Technology
2002 State of the State IT Report

Office of Information Technology

Overview

The Office of Information Technology (OIT) serves as the focal point for the state's information technology issues, policies and initiatives. Directed by Missouri's Chief Information Officer, Gerry Wethington, the organization is responsible for areas such as IT policy, strategic planning, e-government, enterprise architecture and standards, to name just a few. Listed below are the highlights of the major initiatives supported by this office. Many of these initiatives cross multiple years and exist as ongoing projects within OIT and will continue into this next calendar year and beyond.

E-Government

Missouri's e-government initiative experienced its share of ups and downs during 2002. The e-government infrastructure RFP was awarded on April 15, 2002, to the IBM Corporation. Since the state has chosen to pursue the bid proposal's minimal cost option, the Motor Vehicle Record Retrieval System (MVRRS) is being explored with the Department of Revenue, the Department of Transportation, and the Office of Administration for possible implementation as an alternative payment stream solution. This alternative payment solution is necessary due to no additional funding appropriated in FY03 for the e-government initiative. Current work is being accomplished on funding obtained in the FY02 appropriation. An appropriation request will again be submitted for FY04.

Current work being accomplished for e-government includes a new portal for the state's home page that is designed around living, traveling, learning, working, and doing business with state government. This new portal, implemented on July 1, 2002, provides a more user-friendly design that focuses on what activity a citizen wishes to do with state government, rather than the citizen needing to know which agency is needed to conduct business. Other areas addressed by e-government as ongoing initiatives include creating standards for the portal, a statewide data dictionary, exploring options for a new portal search engine, and doing additional work on the e-government communication plan.

National recognition for Missouri's e-government initiative was received during 2002:

- The National Association of State Procurement Officials (NASPO) annually presents the "Cronin Award," considered the Academy Award of state procurement organizations. This year's recipient is the Office of Administration Division of Purchasing and Materials Management. The nomination, "Strategic Proposal Specification Development Methodology," profiled the process utilized for the development of the e-government infrastructure RFP. Selected by NASPO on the criteria of cost reduction, innovation, service improvement, transferability, and/or involvement of customers. Missouri was recognized for its innovative approach of encouraging vendor involvement in the RFP development process through the use of workshops and website interaction. In dollars, the project resulted in a cost avoidance of approximately $432,000.

- The May 20, 2002 issue of Government Computer News featured a story about a class assignment conducted by the National Defense University to determine the two best definitions of e-government in both the government and private sector. Definitions chosen by the students and instructor were from Microsoft and the State of Missouri. Missouri's definition says e-government allows government to interact electronically with citizens, companies, and other governments, possibly in the form of filings, payments, or obtaining information; the ability to pay taxes, renew licenses, etc. over the Web; and has one-stop transactional services delivered via a Web portal. It was stated that the class would present the findings to the CIO Council and to certain congressional members.

.GOV URL and E-Mail Initiative

The .GOV domain recently became available for use by state, county and local municipalities. Prior to this time, .GOV was reserved for the use of Federal government agencies and programs only. With its beginning in late 2002, a .GOV URL initiative was created and standards were developed to address the state's portal as well as URL addresses for the state departments and agencies. Missouri.gov will serve as the primary URL for the state's portal with mo.gov as the alias URL. By the end of 2002, departments submitted the .GOV URL they intend to use following the accepted standard. The departments will have the 2003 calendar year to migrate their web pages to the .GOV format.

Another .GOV initiative intended to simplify electronic services to customers is in the area of e-mail addresses. Currently there is no statewide standard for e-mail addresses and each department sets its own naming convention. Work is currently underway within the state's information technology community to determine an appropriate naming convention and standard using the mo.gov e-mail address. It is anticipated that a standard and migration solution will be finalized during 2003.

Data Security and Online Privacy

Data security and online privacy continue to be important issues to the State of Missouri. A statewide security committee exists with representation from the state agencies and the

Office of Information Technology. They work together to make security recommendations, suggest policies, and serve as their agency contact for any online viruses or security breeches. A second security committee exists that works closely with Tim Daniel, Missouri's homeland security director. The second committee is comprised of the state's CIO and representation from the statewide security committee. The Office of Information Technology encourages each agency to have an individual assigned to take responsibility for data security and online privacy issues.

Business Continuity

Business continuity is an issue addressed in the 2002 IT Strategic Plan and is a concern of all departments. Although the state runs a tremendous amount of its computing effort through the Office of Administration's State Data Center, the computing process still touches all the agencies in some fashion and many departments run their own small systems at various locations, thus making business continuity an important issue for all of Missouri State Government. Through direction by the Office of Information Technology, all departments will be requested to either have their business continuity plans in place or be in the process of creating such plans.

Homeland Security

The Office of Information Technology is directly involved with this statewide effort. Representatives from OIT serve on the Missouri Security Council and the Deputies Council. OIT leads the cyber security and business continuity issue teams and participates on the other homeland security initiative teams.

IT Accessibility Standards

The Office of Information Technology worked with the Missouri Assistive Technology Council to develop a comprehensive set of information technology accessibility standards to assure state compliance with the provisions of RSMo 191.863 and Section 508 of the Workforce Investment Act of 1998 regarding accessibility of information technology for individuals with disabilities. Stakeholder involvement was an important part of this project and included input from the Digital Media Development Group, Information Technology Advisory Board, MOREnet, OA/Division of Information Services, OA/ Division of Purchasing and Materials Management, Department of Natural Resources, and several State Colleges and Universities. To ensure consistency when administering contracts or grants, common language was developed that will be used when developing procuring, maintaining, or using information technology products and services. Final ITAB approval of the standards should occur in December 2002 with implementation of the standards scheduled to begin January 2003.

Software Use Policy

In an effort to protect the state from the illegal use of counterfeit and other forms of pirated software, Governor Bob Holden issued Executive Order 02-11. Software piracy can have a serious chilling effect on creativity, innovation, and profitability in the vital high-technology sector of Missouri's economy, and can reduce tax revenue due to the State of Missouri. In response to Executive Order 02-11, the Office of Information Technology solicited help from several members of the Information Technology

Advisory Board to draw up preliminary plans and develop model policy and guidelines for agencies to follow to prevent and combat computer software piracy. Implementation of these policies and guidelines is scheduled to begin the third quarter of FY03 with full policy implementation and ongoing compliance efforts to be in place the first quarter of FY 04.

Strategic Planning

A two-day information technology strategic planning session with participation from members of the Information Technology Advisory Board and the Office of Information Technology was held in May of 2002 at the Ike Skelton Training Center. The strategic planning process included review of the prior plan and briefing by Gerry Wethington, CIO, of Governor Holden's expectations for information technology's role in government operations. The Missouri Information Technology Strategic Plan, instrumental in helping the Office of Information Technology lead this state into the information age, can be accessed at www.oit.state.mo.us by clicking on 'Current IT Reports and Plans'.

Project Management Initiative

A Project Management Standing Committee has been established to coordinate the development and implementation of project management efforts including Missouri Value Assessment Program (MoVAP), Performance Measures, Risk Management, and Project Oversight. To establish goals and objectives, a committee charter was developed and approved and can be accessed at www.oit.state.mo.us by clicking on 'Project Management' under 'Business Solutions'. Training continues to be an important part of our project management initiatives and we continue to increase the number of Missouri Certified Project Mangers working on our IT projects. Currently 146 individuals have successfully completed the program and hold the designation of Missouri Certified Project Manager. Several revision were made to version 1.3 of the Missouri Project Management Best Practices manual making the current version 2.0 an even better fit to the way Missouri State Government does business. The following is a status update for the various committees and programs associated with Missouri's Project Management program.

- ***Risk Management:*** Risk management exists as an important part of the project management training curriculum. All information technology appropriation requests are required to include a risk assessment of the requested project. Current Risk Management practices are being reviewed by the risk management committee for any necessary changes in order to keep up with new industry standards and best practices.

- ***Performance Measures:*** The Performance Measures committee, with assistance from the Department of Elementary and Secondary Education, has been working to web-enable the project data sheet identified in an earlier effort. This will allow project managers to capture information throughout the lifecycle of a project and will allow shared retrieval of this information across IT departments for future use in the development of future project plans and estimates. A demonstration of this

web-enabled project data sheet was presented at the July 31, 2002 ITAB meeting. The committee has been researching the use of additional performance measures and methods of capturing, retrieving, and using the measures to enhance project management efforts. A coordinated effort is being planned with the Project Management Standing Committee to develop an application to collect, store and retrieve historical data as they relate to IT projects that will include resource estimates, scheduling, risk, performance measures and lessons learned.

- ***Missouri Value Assessment Program (MoVAP)***: The Missouri Value Assessment Program is a methodology developed to help answer the question, "Should a business project be undertaken if the cost to create, implement and maintain is greater than the value/savings returned to state government and ultimately the citizen?" While some business projects will truly generate a fiscal return on investment, others will only generate goodwill. i.e., better service and improved citizen satisfaction. This program is designed to uncover these issues and contribute to fully informed decisions.

  During 2002, the MoVAP committee worked through numerous details associated with how and what information is necessary to capture in order to take a realistic look at the cost and benefits associated with information technology projects. A methodology was created and presented to the ITAB for review and approval. The approval was obtained from ITAB and the committee, working with the Project Management Standing Committee, is currently conducting a pilot exercise using an existing information technology project. This exercise will help to refine the methodology prior to its implementation for all IT projects submitted for the FY05 fiscal year.

Oversight of Missouri's Information Technology (IT) Projects

The Office of Information Technology serves as the focal point for the statewide IT Oversight Program by developing policy and providing reviews for project oversight compliance. The goal of project oversight is to increase the state's ability to successfully apply IT to meet its business needs by facilitating IT project success. The program specifically focuses on evaluating and communicating overall project performance on a regular basis to provide confidence that the project will satisfy the intended business result, and be completed on time and within budget.

The primary focus of the program is the state's most significant IT projects. These IT projects are designated as significant due to one or more project characteristics or factors such as high cost, high business criticality, legislative mandates, administration policy importance, revenue generation, and/or high public profile. These significant IT projects represent, for the most part, those new automation activities that must succeed in order for Missouri State Government to continue with significant portions of its day-to-day business operations and the uninterrupted delivery of critical program services to the public.

Failure of any one or more of these significant IT projects would have substantial consequences for the state including, but not necessarily limited to, monetary losses, service and/or service level disruptions, loss of public confidence in state government, loss of credibility by state government, failure to meet legislative mandates, missed opportunities to advance the administration's programs and policies, and many other equally severe and/or undesirable effects.

In addition, the statewide IT Oversight Program strives to ensure that reasonable and prudent oversight is performed on all other IT projects in Missouri State Government. Failure of these other IT projects, while not resulting in the same substantial difficulties and/or losses for the state as would the failure of one or more of the significant IT projects, would still have an adverse impact on state business operations and service delivery.

Large projects bring with them many complex issues and difficult tasks. By implementing an oversight approach that combines project status assessment, monitoring and reporting, state agencies and departments have recognized successes in the areas of improved management of project elements, early detection of project needs, identification of interrelated problems, encouraged communications, and project inventories to provide an efficient means to apply "best practices" and "lessons learned" to future projects. The statewide IT Oversight Program has become an integral part of IT projects and is providing a service that should greatly increase the probability of overall project success.

Network Management

A new Network Management Consortium was appointed by Gerry Wethington, CIO, to become prescriptive in the state's actions with respect to management of existing network assets, ensure Missouri State Government maximizes its investment in network assets, and effectively plan future network strategies based upon full knowledge and disclosure of network business demands. The goal of the consortium is not to develop a network consolidation strategy, but more importantly to ensure that Missouri manages its existing assets and further acquires and manages future assets in the most effective manner possible, driven by business requirements rather than technology silos. Agencies with major network assets have been invited to participate as well as a representative sample of network customers.

The Network Management Consortium charter was adopted September 12, 2002 and may be accessed at www.oit.state.mo.us by clicking on 'Network Management' under 'Technology Initiatives'. A pilot project for the consortium has been identified and consists of network planning and implementation for the South Service Center project at Lindberg in St. Louis. A project committee has been appointed and has been meeting with representatives from the four agencies involved in the move. The project team felt that the right mix of people from fiscal, administrative, and technical areas have been involved and that this has led to good open discussions. OA/Division of Information Services has coordinated wiring efforts with Facilities Management. Lessons learned are being documented and will be used on future projects of similar nature.

Enterprise Architecture

One of the primary areas of responsibility for the Office of Information Technology is the development of an enterprise architecture that facilitates business system sharing across departmental lines of responsibility. The information technology community as well as business components have developed an understanding of the need to share information. Much of this understanding has come from the proliferation of the Internet and the citizen demand for a singular view of state government. Departmental functional boundaries and stovepipe applications have created barriers to information sharing and have hampered the state's ability to react to citizen requests.

In order to share information across a number of federated agencies, there must be standards that allow interaction and interoperability. The intent of the state's architecture project is to build an infrastructure that is based on a common set of standards used by all departments. These standards allow for integration across department boundaries, ensuring that each department can appropriately access information from other agencies when necessary. This concept of standardization is readily apparent in other engineering development efforts and needs to be applied to the information technology realm.

This year the Office of Information Technology, working through the Architecture Review Committee, completed the Missouri Adaptive Enterprise Architecture (MAEA) Manual and submitted the document to the Information Technology Advisory Board (ITAB) for approval. Adoption of the MAEA manual provides a methodology by which the information technology community will develop architectural standards.

Subsequent to the adoption of the MAEA methodology, the Office of Information Technology launched the first architectural domain. The Security Domain committee was appointed and began to populate the architectural blueprint for security issues within the state. This effort will result in the cataloguing of guidelines, standards or policies for agencies to use to address technology security issues. Other domains will be launched as time and resources permit.

Justice Information Systems Integration Project

An important goal for Missouri State Government is to store data more cost-effectively and to share information more efficiently among justice agencies and institutions. The automation and integration of justice information systems promise improvements in the quality and speed of decision-making throughout the justice system. The benefits of integrating justice information systems also include cost savings, improved performance and service delivery, elimination of redundant data entry, and increased public safety.

As part of this project, a State Justice Committee was formed in 2001 to identify the challenges of integrated justice information systems, develop recommended strategies to address these challenges, and build an information infrastructure necessary for effective state and local justice integration. A "snapshot" will be taken of state and local integration status identifying the information sharing business needs and requirements of law enforcement, prosecutors, courts and corrections. From this information a set of

recommendations will be developed that support electronic information sharing within the justice community.

Exploring Alternatives for Project Funding

Funding for state-government IT projects has become increasingly challenging due to the need to keep technology current and provide the technical infrastructure to support universal citizen access. This demand for current technology is often at odds with competing budgetary requests. Because of this, the Office of Information Technology is looking for alternative sources of funding such as partnering with other agencies to develop collaborative projects through centralized funding, issuing bonds for IT projects, and seeking federal grants.

To ensure financial resources are wisely invested in the best use of IT to serve the greatest priorities of the state, the Office of Information Technology will recommend funding strategies that combine a vision-driven planning process and alternative funding sources. Using a comprehensive program of project and risk management, performance measurement, total cost of ownership/return on investment, project oversight and enterprise architecture, the model will provide a comprehensive solution to focus the planning process on the correct priorities, and fund projects which produce measurable results.

IT Mentor Program

Initiated during 2002 by the Information Technology Advisory Board with assistance from the Office of Information Technology, an IT mentoring program was developed to address the need for knowledge transfer for incoming department CIOs. Through an ITAB committee, a methodology was developed and considerable information and forms made available to participants, both mentors and protégés. Mentors will be selected from current department CIOs. The first mentor/protégé team was put in place in 2002 to accommodate the filling of the CIO position at the Department of Agriculture. During 2003 this web-based program, with its resources and forms, will be established on the OIT website under the "members only" category. The IT Mentor Program should prove to play an important role in the transfer of knowledge within Missouri's IT community.

Missouri Technology Newsletter

During 2002 the Office of Information Technology initiated a newsletter detailing Missouri State Government's information technology news titled *Missouri Technology*. Beginning with the Summer 2002 issue, this newsletter will be published on a quarterly basis and distributed electronically to an audience consisting of the ITAB, Senate and House Appropriation Chairs, the Office of Budget and Planning, Cabinet Directors, E-Government Oversight Committee Members, as well as posting it on the OIT website for the public audience.

Web Site Project

The Office of Information Technology developed a web site to help bring the power of the IT community's ideas and strategies to the forefront. The comprehensive web site

provides an efficient and effective means to share statewide policies, processes, best practices, lessons learned, and other information with the state's IT community. Additionally, the site provides access to information about the Office of Information Technology and the many statewide initiatives under its direction.

Governor's Youth Cabinet

During 2002, Governor Bob Holden formed the Governor's Youth Cabinet so that young people could voice their ideas about how to make Missouri a better place. Forty-five young Missourians were appointed on October 28, 2002 with assignments made to various department directors based upon the student's area of interest.

Two students will be working directly with Gerry Wethington, CIO. Those selected for the area of information technology are Kathleen Fitterling of Warrensburg and Steve Rogers of Des Peres, MO. As part of the program Gerry meets with the students, informs them of current information technology issues Missouri faces, and will be involving them in an e-government initiative during 2003.

For more information regarding the State of the State IT Report contact:

Missouri Office of Information Technology
Truman Office Building, Room 560
PO Box 809
Jefferson City, MO 65102
573/526-7741
www.oit.state.mo.us

Office of Administration

Accomplishments

Technology Services
MOBIUS
Work continued on the MOBIUS project, which allows online viewing of reports and some archiving. The Telephone Billing System was converted to MOBIUS in the spring of 2002. This system produced many boxes of paper monthly. This was then broken into agencies and sent to the customers. For some time customers have been requesting an electronic version of the bill. Using MOBIUS to produce the bill has satisfied these requests. This produces some cost savings in not printing the reports on paper and mailing them.

Roll Checks
In July 2002 the Data Center was able to change check printing to roll checks, rather than fan fold checks. Additionally, customers were able to agree upon a standard check form for all checks printed in the Data Center. This has reduced the reject rate when Central Bank Data processes the cleared checks. It also makes it simpler for Data Center staff to run checks, as there is a standard for all checks and not multiple check setup processes. This also provides cost savings in not having to deal with various preprinted checks and lowers rejects to the bank.

Network Transport Bid
In August 2002 a contract for wide area transport was awarded to Southwestern Bell Long Distance (SBCLD). This replaces three contracts that were held by Sprint Local Telephone Division, Southwestern Bell Local, and AT&T. These providers provisioned the state's Integrated Voice and Data Network (IVDN).

The IVDN required the state to manage the switching gear that was located in various cities throughout the state. This included load management, both logical and power, port assignments, bandwidth planning, etc. The switching gear was basically only housed in the telephone company facilities. Sprint did provide minimal surveillance.

The new contract with SBCLD is a bandwidth contract. SBCLD has **A**synchronous **T**ransfer **M**ode (ATM) switches in St. Louis, Kansas City and Springfield. They will collocate a fourth switch in the Jefferson City Sprint Central Office. Because there are Service Level Agreements (SLA's) in the contract, the state will be in a position to buy bandwidth. Bell will be responsible for the switch management, surveillance, etc.

The first phase of implementation is now in process. Many of the IVDN switches are being removed and agency networks are being moved to the SBCLD facilities. In March 2003 the Jefferson City switch will be operational and the remaining conversions will be completed. This should result in savings to the state.

Three switches of the IVDN will be retained for three additional years. There are several state agencies that run lower speed, analog networks. These will remain on the IVDN until a more cost effective technology can be identified for them.

Internet Services

The Internet Services that are managed by OA/DIS and obtained from MOREnet have been upgraded throughout 2002. Besides additional bandwidth, virus checking on incoming Internet mail has been added to some of the mail servers. Research is being done to determine whether or not electronic junk mail or junk newsgroup postings (SPAM) control should also be implemented.

Missouri Technical Training and Education Center (MOTEC)

MOTEC is dedicated to promoting information technology (IT) training throughout state government and facilitating access to IT training and education for approximately 1,450 IT staff. MOTEC provided 1,957 IT students with 4,247 days of classroom IT training. This provides a cost savings to the state by not having travel expenses for staff in the local area.

MOTEC has coordinated statewide access to contractually provided computer-based training. MOTEC has also developed an in-house, centralized development base for web and network computer-based training. The latest project with the Department of Health and Senior Services involves developing computer-based training for epidemiology.

SYSTEMS AND PROGRAMMING

Statewide Advantage for Missouri (SAM II)

- An upgrade to version 2.3.2 was completed for the Human Resource/Payroll (HR) System. It was the first major upgrade since HR was implemented and brought it to the current release level. The upgrade included 346 APR's (Application Program Resolutions) to baseline programs and enhancements to Position Control processing.

- An interface was developed for the OA Training and Tracking System to create an input file into the HR Employee Relations System. (This interface allows for

the tracking of education classes taken by state employees.) The interface reduces double entry of data.

- An enhancement was added at the request of agencies to allow accounting distribution lines be changed from one line to many lines. The original General Ledger (GL) programs would only allow a one-to-one relationship for changes in accounting distributions. The one-to-many enhancement allows agencies to change a single accounting distribution to be spread across ten different fund distributions. This enhancement impacted most of the GL related programs and job streams.

- An upgrade to version 2.2 was completed for the Financial System that brought the system up to the current release level. The upgrade included functionality for Governmental Accounting Standards Board (GASB) 34/35 standards and over 350 APR's (Application Program Resolutions) to baseline programs. Changes were also required for the Data Warehouse.

- An enhancement was made to Financial in the area of Inter-agency billing (IAB) for improved functionality and reporting.

- There was a continued optimization effort for both HR and Financial. The batch cycle costs and runtimes have been reduced significantly as a result. Data archival jobs were run to reduce the amount of outdated transactional data stored in the system.

- A version upgrade was completed for the Budget software subsystem, BRASS. An ORACLE upgrade to version 8.1.7.3 was also performed.

- CYE updates were completed that included changes to W2 processing and formatting.

- Modifications were made to the Financial Data Warehouse to make reporting by Fiscal Year easier.

- Fixed Assets data conversions for all agencies are scheduled to be complete by the end of fiscal year 2003.

- To improve efficiency the HR and Financial systems were moved to a separate CICS region from other State Data Center systems.

- Assistance and conversion activities were provided for the transfer of employees from the Division of Aging (Department of Social Services) to the Department of Health, Division of Senior Services. The automation of the conversion saved hundreds of hours of resource time.

Imaging

The divisions of Accounting and Personnel were migrated from an AS/400 imaging environment into a client/server NT based imaging system using software from OPTIKA. The purpose of this migration was twofold. One being the AS/400 was obsolete hardware with the O/S out of maintenance and the architecture being such it could not be upgraded to a newer release. The hardware maintenance was very expensive and would be unavailable in the near future. The second one being added functionality for the customers and the ability to WEB enable the stored images.

Added functionality includes the ability to send and receive fax documents in and out of the imaging system from a user workstation. The divisions of Personnel and Purchasing and Materials Management have made information available to the agencies and public of certain documents contained within the imaging system using the Internet. It also allows the sending of requested documents to customers electronically rather than mailing them, which has resulted in better, quicker and less expensive service being provided to the customer.

Telephone Billing System (TBS)

All reports for TBS were converted to MOBIUS to reduce print and paper costs. Agencies now have access to the reports electronically. An analysis project was also conducted on the overall methodology of TBS. As a result, many changes were identified in the areas of the batch cycles and job streams in order to make the system more efficient, logical, and easier to maintain. Significant changes were required due to new telephone contracts such as the 1+ contract.

Advantage:GEN

The Computer Associates desktop application development case tool was upgraded to the Advantage:Gen 6.0 version. All client/server systems were completely re-generated and re-deployed. These systems were also changed to use the new capability of Advantage:Gen to use TCP/IP directly to the mainframe thereby eliminating the need for two Communication Bridges on NT servers for --*Systems Network Architecture* (SNA) connectivity.

Lease Management System (LMS)

An enhancement was made to LMS to allow 25 functions to be tracked in the lease project cycle. There was also some unused functionality that was removed. Extensive changes and database modifications were required.

Fleet Management System (FMS)

Requirements were completed for the new statewide FMS that the Division of General Services will administer as mandated by the General Assembly. It will be a Web based system developed by OA to track vehicles statewide in a centralized system to be used by all agencies to track repairs, fuel consumption, maintenance, usage, etc. The Advantage:GEN case tool will be used to develop the application.

Management and Applicant Information Resource System (MAIRS)

- Functionality was added to MAIRS to allow agencies to enter Vacancy Posting data. This data is then exported to a Division of Personnel Web site for citizens to easily check vacancies throughout the State.

- Grade Notice Forms were redesigned to print on stock paper and eliminate the need to purchase pre-printed forms. Examination Notice Forms were redesigned due to a change in the form stock.

- MAIRS data is transferred to the Imaging System eliminating the need for double entry.

- Modifications were required, especially in the exam scheduling, due to changes by the Division of Personnel in the Merit System clerical classes requirements.

Risk Management System

An interface to SAM II Financial was developed to automate Cancellation transactions thereby eliminating the need to manually enter the transaction into SAM II Financial. As the result of a Missouri Results Initiative (MRI), modifications were made in the area of Duty and Lost Work Days processing. New screens and reports were added.

Training and Tracking System

Major portions of the system were rewritten to interface data to the Employee Relations Subsystem of SAM II HR. The modification and interface will eliminate the need to manually enter the information into SAM II HR.

Office of Equal Opportunity (OEO) System

Extensive changes were required to be compatible with new Federal Reporting guidelines. These new guidelines reduced the number of factors used in Affirmative Action reporting.

SDC Billing System

Modifications were made to the billing system to handle the new mainframe operating system (Z/OS).

Mailing Label System

The old mainframe Mailing Label System was converted to an Access database system that creates files of label information to be processed and printed by OA State Printing.

OASDHI System

The old mainframe OASDHI federal reporting system was converted to an Access database system to be used by OA Accounting.

WEB Projects

- Developed new web pages for:
  - State Portal
  - Homeland Security
  - Missouri Life Sciences
  - First Lady's Web Site
  - Lt Gov Kid's Page
  - New designs for Office of Administration and Office of Information Technology's Web Sites
  - Missouri Commemorative Quarter voting Web Site

Other enhancements include:

- The FY 2003 Executive Budget was posted for fast and easy public viewing of the budget.
- A search capability was added to the Online Bid Server site to provide citizens with a method to search statewide contracts.
- Modifications were made to the Governor's Office Events Tracking Database such as generating a "Letter of Regret" for requested events that are declined.
- Developed an OA Privacy Statement for the main OA Web page and all divisional pages.
- Assisted the Administrative Hearing Commission in converting 'decision' data from their application for posting to the Internet.

E-Government Initiative

Work continues with the agencies in making more state services available via the Internet. A lot of our effort during fiscal year 2002 has been research and discussions about our alternative payment options. Completion of the infrastructure and portal have been delayed until a funding option is in place. Other task being worked on is portal standards and a couple of pilot projects with the small business administration at the federal level.

Planned Projects

SAM II

- Analysis will begin regarding a Financial upgrade to the latest release from the SAM II software vendor, American Management Systems (AMS). The 3.x version will be web based and should contain many of the modifications that were done for the Missouri system. New technical requirements and other considerations will have to be analyzed in order to install/support the 3.x version.

- A third party case tool was used by AMS to develop the version, thus creating a need for OA to become proficient in the tool to successfully support the system. There is also additional third party software that will have to be acquired and installed.

- A technical analysis will be performed by DIS to determine data conversion needs and impacts to custom interfaces and reports.

- Additional hardware will need to be purchased and installed.

Fleet Management System

- Develop and complete the new statewide Web based system for the Division of General Services.

- It will be developed in house by DIS staff using the Advantage:Gen case tool.

- The major benefit of the new Fleet Management System is to have all state-owned vehicles located in one central system that will allow for ease of reconciliation with the Department of Revenue's Vehicle Titling System. Another benefit is to provide an automated fleet tracking system for state agencies that currently do not have any type of fleet system. The system will provide all of the annual federal reporting required by the Department of Natural Resources. It will also capture data needed to document the cost of owning and operating each state vehicle to aid in the efficient and cost-effective management of the fleet.

- The centralized system to be used by all agencies across the State will track repairs, maintenance, fuel consumption, usage, etc.

Surplus Property System

- Develop a new Surplus Property System for the Division of Purchasing and Materials Management. They currently use a multitude of Lotus spreadsheets that requires duplication of data entry. A new system is needed that will improve their process and integrate with SAM II Financial.

- It will be developed in house by DIS staff.

- Surplus Property currently uses a method of interagency billing that is not compatible with all other interagency billing being done by the state. This will also bring them into compliance with usage of standard customer numbers in the SAM II Financial System.

Telephone Billing System (TBS) Review

A review of the current process and functionality for TBS will be conducted. Possible outcomes are: develop a new system; purchase a new system; or make major modifications to the current system.

OA Server Consolidation

Currently, a few divisions within OA support and house servers for their use. All servers and support will be transferred to the Division of Information Services. The consolidation will centralize the support, provide a secure environment in the State Data

Center, obtain backup power capabilities, and become a part of the departmental disaster recovery plan. In the long term this provide cost savings to the state.

Microfiche Replacement

The Data Center will be working with customers to review the use of microfiche as a medium for record retention. CD burning is being considered as the alternative, as it would be less expensive. The State Archivist will provide information on required retention.

Network Transport Bid

Work will continue on the implementation of the Network Transport contract. The Jefferson City switch will be installed in March 2003 and customers will continue to move their traffic from the IVDN to the Southwestern Bell Long Distance (SBCLD) network.

Internet Services

The Network Services group will work to implement a second Internet access point for state agencies. It will not be located in the Truman Building, where the current MOREnet POP is. The new access point will be for redundancy and will also be load balanced with the current access point.

- ***MO.GOV URL Initiative:*** The Network Services group will also work to implement mail coming to @mo.gov or @missouri.gov, when the OIT announces the implementation plan.

- ***MO.GOV E-Mail Initiative:*** This division is working with the OIT office to establish one description for the state's e-mail address.

E-Government Initiative

A legislative package is being prepared to address issues with our alternative payment options. If approved, our alternative funding model would start generating revenue in fiscal year 2004. Efforts will continue in establishing standards and policy around our e-government contract to be used by those agencies developing web-enabled applications. We will continue to participate in the pilot projects with the Small Business Administration at the federal level to provide input on requirements and the possibility of receiving some funding.

Accumulated Demand

Division of Information Services has a number of projects scheduled but due to smaller budgets and shifting resources the start –ups have been delayed. These delays, coupled with agencies looking inward for application development due to smaller budgets, will increase the accumulated demand. The pending risk of layoffs will have a very dramatic

impact on project completion. Most of the scheduled projects provide services across agencies on statewide bases.

For example, in the State Data Center area, we do not have the resources at this time to host our E-government infrastructure, pursue server consolidation or administering other platforms. Another accumulated demand area is our telecommunication agency analysis. This analysis is being done to make cost savings recommendations to the agencies. Due to limited resources, we can only do a limited amount at this time.

General Department Profile

Department Name
Office of Administration

Street Address	City	Zip
Capital Building, Room 125	*Jefferson City*	*65102*

Main Phone Number	Main Fax Number	Website URL
573-751-3311	*573-751-1212*	*www.oa.state.mo.us/*

Department Director
Jacquelyn D. White

Number of FTE (entire department)	Approximate number of citizens served
1,085	*5,000,000*

Agency Mission (brief statement)
The Division of Information Services' mission is to provide quality data processing and telecommunication services, resources and solutions to support state agencies so they can fulfill their missions for the citizens of Missouri.

Department CIO and IT Division Profile

Department Name		
Jill Hansen		
Department CIO Name		
Office of Administration		
Street Address	City	Zip
301 W. High Street	*Jefferson City*	*65101*

CIO Phone Number	CIO Fax Number	E-Mail Address
573-751-3338	*573-751-3299*	*hansej@mail.oa.state.mo.us*

CIO Membership in Professional Associations – Leadership Role Involvement (i.e., NASCIO – serve on architecture standards committee)
Past ITAB chairperson, Vice Chair of Network Consortium

IT Division Name	Website URL
Division of Information Services	*www.oa.state.mo.us/dis/*

Number IT FTE (located in central office)	Number IT FTE (located in field)
193	*MOTEC-3*
Total $$ value of FY03 IT requests submitted to OA Budget and Planning	Total $$ value of FY03 IT requests funded

Security Officer Name	Phone No.	E-mail
Privacy Officer Name	Phone No.	E-mail
ITAB Alternate Name	Phone No.	E-mail
Gail Wekenborg	*573-751-1504*	*wekeng@mail.oa.state.mo.us*
SDC Steering Committee Rep Name	Phone No.	E-mail
Jill Hansen	*573-751-3338*	*hansej@mail.oa.state.mo.us*

Department Technology Profile	
Department Name	
Office Of Administration	
Main Processors (IBM 390 with MVS, UNIX AIX, UNIX Sun, etc.)	
Mainframe	*IBM 2064s with zOS, UNIX,VM, Linux, MVS*
PC Servers	*NT, SQL, Windows 2000, Linux*
Mid-range	*AIX*
Networked	*NT*
Desktop (Windows XP, 3270, Linux, etc.)	
PC	*Windows NT & XP& 2000*
Dumb terminal	*3270*
Network Protocols (TCP/IP, SNA, IPX, etc.)	
TCP/IP, SNA	
Internet Connections (DSL, Cable, Dialup, etc.)	
Dedicated and dial-up	
Internet Service Provider (MORENET, AOL, etc.)	
MoreNet and Socket	
Security Provisions (packages, anti-virus, filters)	
Network	*McAffee*
Desktop	*McAffee*
Internet	
Help Desk Packages (Magic, GWI)	
GWI, TRACKIT, Wicket	
Database Management Systems (DB2, Oracle, SQL, etc.)	
DB2, IDMS, Oracle, SQL, DB2 UDB, Supra, Domino	
Development Tools (COBOL, CICS, Advantage:Gen, Websphere, .NET, etc.)	
COBOL, CICS, Advantage:Gen, Focus, Cold Fusion, WebSphere	
E-Mail Packages (Exchange, Lotus Notes, etc.)	
Exchange, Notes	
Encryption Packages (SSL, PGP, etc.)	
SSL	
Version Control Packages (Source Safe, Panvalet, InterSource, etc.)	

ELIPS, SMPE
Telecommunications (T1, Frame Relay, etc.)
T1, Point to Point, fractional T, FRX, ATM
GIS (ArcView, MapInfo)

Department of Agriculture

Accomplishments

WEB Efforts

Completed redesign of departmental web site, updating to meet state standards. Moved Grape and Wine web site from an outside contractor to Agriculture staff, thus reducing the cost of maintenance.

Office Vision 400 Conversion

Continued review of alternatives to Office Vision 400. A number of documents were changed but remaining merge-type documents need to be converted. Several software products are being evaluated as replacement for Office Vision 400. IBM is scheduling withdrawal of support for Office Vision 400 in July 2003. Future operating system upgrades require a solution before upgrading.

Security

A Cisco PIX firewall was installed to provide additional security. Efforts were continued to select additional virus protection for all users.

Application Development

- *Sam II Interface* – receiving data directly from SAM-II, eliminating manual processing of the data via tape and replaced with an automated one. Improved user access to data thru timelier processing.

- Developed Federal Indirect Cost and Expenditure Reporting system. Captures and tracks Federal grant data providing improved budget and expense information for the grants received by the department.

- Implemented UPS labeling system for samples of hazardous materials using Sprint PCS wireless communications.

Some planned application development was delayed due to priority requirements and until more resources were available.

Help Desk

Our help desk received 1992 calls for service, 1907 of which were completed by IT staff. Efforts to refine the help desk process continue with the goal of providing improved response time and more efficient service.

Enhancements to Existing Applications

- The Animal Care Facilities Act system
- Boll Weevil tracking and collection system
- Service Station Inspection system
- Fleet Management System – updated for future use with SAM II
- Revised Nursery Growers, Nursery Dealers and Treated Timber Dealers systems
- Developed the Federal Indirect Cost and Expenditure Reporting system, which allowed recapture of indirect costs from previous fiscal years.
- Developed programs to allow Federal and other grant expenditures/balances to be tracked.

With the continued need for upgrading and additional technology we will continue to revise and improve the existing systems.

New Technologies

The expanded interest in wireless communications has triggered continued research into use of PDA's and more use of wireless laptop access.

Network Improvements

- Installed two network color-scan stations for use with imaging technologies.
- Implemented Microsoft Software Assurance licensing contract.
- Implemented Inventory Software Program to track and document software licensing.
- Installed Primary Domain Controller on Linux Server.

Three Year Personal Computer Replacement Policy

In keeping with this policy, 55 desktop PC's and 33 laptops were replaced, including upgrading the operating systems to Windows XP. This policy provided for replacing the PC's every three years, taking advantage of the warranty period and removing the requirement for maintenance contracts.

Planned Projects

E-Government
The Department of Agriculture will participate in the statewide e-government initiative as funding and resources are available.

Office Vision 400 Conversion
With the upcoming withdrawal of support for release 4.5 of the I series 400 operating systems, it is critical that we convert all Office Vision documents to Microsoft Word, Lotus Notes or some other alternative software product. The remaining text merge documents will be targeted for conversion.

Application Development
The MASBDA, Seed Lab, Line, Petroleum Systems and Item Budgeting enhancements to SAM II are designated as priority systems for development during the upcoming year.

Development of a GIS system for bio-terrorism will also be started this year.

WEB Initiatives
Increased use of web-enabled applications will be investigated and encouraged. Development of a departmental Intranet is also planned. The Agribusiness web site will be moved from an outside consultant to within the Department of Agriculture.

New Technologies
- Use of imaging technologies will be expanded.
- Wireless technologies will be explored, particularly in the area of PDA's and use on the grounds of the State Fair.
- Increased use of faxing from the desktop will be encouraged.
- Upgrade of DOS applications to new operating systems are scheduled.

Security
Implementation of improved Virus protection.

Network
- Hands free software installs and updates.
- Antivirus protection.
- Evaluate improvement in telecommunication speeds to laboratories and State Fair.

Training
With the constantly changing technologies and new features of software, the need for user and IT training has never been more apparent. Increased emphasis on training to gain the efficiencies the improved technologies will be made.

Accumulated Demand

We have 85 current open requests on our help desk. We estimate the current accumulated demand would require between 18 and 24 months for completion. This assumes the unrealistic theory that there will be no additional requirements or projects requested.

Shrinking budgets and restricted resources present a series of unique challenges to meet the increasing technological needs of the Department of Agriculture. The ever increasing need for staff with particular specialized skills, plus the need for retaining qualified IT staff and training users to utilize the new technology continue to challenge all to find new and creative methods.

Information technology solutions are critical to the increased efficiency needed within government to improve service, deliver more web-enabled applications, and provide additional statistical information. To continue this upward trend, technology must continue to be supported to be effective.

General Department Profile (2002)

Department Name		
Missouri Department of Agriculture		
Street Address	City	Zip
1616 Missouri Blvd	*Jefferson City, MO*	*65102-0630*

Main Phone Number	Main Fax Number	Website URL
573-751-4211	*573-751-5002*	*http://www.mda.state.mo.us/*

Department Director	
Lowell Mohler	
Number of FTE (entire department)	Approximate number of citizens served
434	*All citizens of the State of Missouri*

Agency Mission (brief statement)
"To serve, promote, and protect the agricultural producers, processors, and consumers of Missouri's food, fuel, and fiber products."

Department CIO and IT Division Profile (2002)

Department Name		
Missouri Department of Agriculture		
Department CIO Name		
Larry Reynolds		
Street Address	City	Zip
1616 Missouri Blvd	*Jefferson City, MO*	*65102-0630*

CIO Phone Number	CIO Fax Number	E-Mail Address
573-751-3071	*573-751-5002*	*Larry_Reynolds@mail.mda.state.mo.us*

CIO Membership in Professional Associations – Leadership Role Involvement (i.e., NASCIO – serve on architecture standards committee)	
Small Users Group of Mid Missouri, COMMON	
IT Division Name	Website URL
Information Technology	*http://www.mda.state.mo.us/*

Number IT FTE (located in central office)	Number IT FTE (located in field)
11	*None*
Total $$ value of FY03 IT requests submitted to OA Budget and Planning	Total $$ value of FY03 IT requests funded
$59,342	*None*

Security Officer Name	Phone No.	E-mail
Larry Reynolds	*573-751-3071*	*Larry_Reynolds@mail.mda.state.mo.us*
Privacy Officer Name	Phone No.	E-mail
None		
ITAB Alternate Name	Phone No.	E-mail
Jim Meili	*573-522-5067*	*Jim_Meili@mail.mda.state.mo.us*
SDC Steering Committee Rep Name	Phone No.	E-mail
Larry Reynolds	*573-751-3071*	*Larry_Reynolds@mail.state.mo.us*

Department Technology Profile (2002)

Department Name	
Missouri Department of Agriculture	
Main Processors (IBM 390 with MVS, UNIX AIX, UNIX Sun, etc.)	
Mainframe	
PC Servers	
Mid-range	*1-Iseries 400 Model 820 1-AS400 Model 600*
Networked	
Desktop (Windows XP, 3270, Linux, etc.)	
PC	*XP-90 Window 2000-77 Windows 98-110 Windows 95-24 Linux - 1*
Dumb terminal	
Network Protocols (TCP/IP, SNA, IPX, etc.)	
TCP/IP, SNA to the State Data Center, IPX	
Internet Connections (DSL, Cable, Dialup, etc.)	
MAN	
Internet Service Provider (MORENET, AOL, etc.)	
Morenet	
Security Provisions (packages, anti-virus, filters)	
Network	*Cisco PIX firewall*
Desktop	
Internet	
Help Desk Packages (Magic, GWI)	
Lotus Notes self written programs	
Database Management Systems (DB2, Oracle, SQL, etc.)	
DB 400	
Development Tools (COBOL, CICS, Advantage:Gen, Websphere, .NET, etc.)	
E-Mail Packages (Exchange, Lotus Notes, etc.)	
Lotus Notes	
Encryption Packages (SSL, PGP, etc.)	
Version Control Packages (Source Safe, Panvalet, InterSource, etc.)	

Telecommunications (T1, Frame Relay, etc.)
T-1 two 56K dedicated Three
GIS (ArcView, MapInfo)
ArcView

Department of Conservation

Accomplishments

New Computer Room

Built a new computer room and then relocated all computer equipment from the Central Office complex to the new facility in the IT building. This was a major undertaking of enormous proportions. The facility was built to "tornado resistant" standards and includes state-of-the-art commercial Liebert heating/cooling/humidity control system, backup diesel generator, APC uninterruptible power supply system, raised floor and Sonitrol security access system.

This project was complex due to the amount of planning involved, the various technical issues addressed, the relocation of equipment to the new facility, the amount of manual labor involved in physically moving the equipment, the coordination with outside contractors, the changes to the fiber optic infrastructure, the testing of software applications in the new environment, the installation and startup of the new HVAC, UPS and backup generator, etc. Planning for the move began many months before the new Computer Room was completed. To put this in perspective, consider the following aspects of the project:

- The amount of people involved included IT staff, MDC's Design & Development (who built the building), Schneider Electric, Sprint, ITI, Liebert, Dell, APC and Sonitrol.
- Almost 100 pieces of computer and related equipment had to be disassembled, relocated and then reassembled and tested in the new environment.
- This equipment included servers, routers, switches, gateways, firewalls, racks, cables, consoles, UPS equipment, etc.
- Movement of this equipment involved an extended (four day) outage of computer networking service. To minimize the impact the outage would have on departmental operations, the move was planned over a holiday weekend, which meant only one work day would be included in the outage.
- The consequences of not completing the work as planned were serious, as department employees would not have access to the network and all its resources when they returned to work after the holiday.

- Because of an upcoming deer season, additional work was necessary to accommodate fiscal operations during the four day outage and included establishing a special electronic link to our Point Of Sale (POS) system on the AS/400, setting up PCs and phones in the auditorium for fiscal staff to answer calls, setting up laptops and printers in the Central Office for print capability while the network printers were down, etc.

This operation was a huge success due primarily to (1) the amount of planning that took place in advance of the move, (2) the amount of preparation that took place in the new computer room prior to the move, (3) the coordination with other parties involved in the operation and (4) the positive attitude, diligence and professionalism of the IT employees involved in the operation.

Network Operations

- Completed a security review and implemented additional security measures to strengthen security where exposure exists. The new computer room addressed many of the physical security issues in the Central Office. We've also implemented a new Internet and email usage policy. Implemented Websense Internet monitoring and blocking software. Implemented MIMEsweeper email filtering software. Implemented Intrusion Detection technology. We will be testing Single Sign On (SSO) software very soon. This works well with MS 2000 O/S and Active Directory. When SSO is implemented, we will implement a more complicated password program.
- Implemented Windows 2000 on new servers and PCs as replacement for Windows NT 4.0 operating system. Upgrades of all Central Office servers will be complete by the end of this calendar year. Remaining field servers will be completed by the end of June 2003.
- Installed 6 new servers in the Central Office, including two DNS servers, one MailSweeper server, one Primary Domain Controller, one GWIA server and one Oracle server as a repository for Central Bank data.
- Upgraded Dell Open Manage servers in the Central Office. Server agents in the field will be upgraded when the Windows 2000 upgrade is completed.
- Upgraded 2 Wide Area Network (WAN) circuits in field offices.
- Installed 2 new local area networks (LAN), one at Rockwoods and one at KC Discovery Center.
- Maintained an average 99.5% network availability throughout the year.
- Replaced 38 network printers and added 8 new network printers.

Desktop Support

- Complete conversion of department office suite software from Corel WordPerfect Office to Microsoft Office, using SMS software distribution. Incurred a 9% failure rate with SMS this time, compared to over 25% when we first started using it.
- Replaced 468 PCs with new Windows 2000 computers.

Help Desk

- Processed 10,146 trouble calls from employees across the state.
- Completed 2,691 maintenance trouble tickets on computer equipment across the state.

AS/400 Operations

Removed the Central Office AS/400 computer and peripherals from service. Equipment will be surplused in 2003. The AS/400 at our nursery in Licking will remain in place until we can move critical software applications to our standard Intel-based network platform.

Application Development

- Completed development and implementation of the Accomplishments and Expenditures components of RAPTOR, the department's web-based budget and work management system. The first two components (Work Planning and Budgeting) were completed last reporting period. The Accomplishments module tracks completion of planned work objectives, while the Expenditures module reports on actual expense and equipment charges against budget.
- Developed an automated inventory system that integrates computer, two-way radio and telephone equipment and allows accurate and timely accounting and reporting of information. This system is built on inventory components of SupportMagic and uses an Oracle DB.
- Developed software applications approved by Division Administrators in the FY 03 Technology Budget Review, including Education Contacts and Trails Database.
- Supported installation of a new Oracle server.
- Installed and integrated a new IVR development toolkit.
- Developed new IVR systems including Conservationist magazine subscription renewal, Waterfowl IVR/Web reporting, Deer IVR Telecheck, Spring Turkey IVR Draw and Turkey IVR Telecheck.
- Integrated an Optical Character Reader (OCR) interface into the Hunter Ed system to process student data forms and export a table to update the Central Bank POS system.
- Developed a Forest Inventory application in VB for Forestry and the US Forest Service that replaced an old Clipper system that interfaces with handheld data collectors to compile forest inventory data.
- Developed a CMT data collector interface for the Vegetation Monitoring system and supported statewide implementation of the system update.

Technology Training

We supported a total of 237 days of computer-related student training for MDC employees.

Voice Communications

- Completed installation of new telephone system at Columbia Research Center and St. Joseph.

- Replaced seven telephone systems, including systems at Bennett Springs hatchery, California, Jackson, Lake Paho CA, Perryville, Roaring River Hatchery and Ted Shanks CA. Also, installed new systems at the Kansas City Discovery Center and Parma Woods Shooting Range.

Wireless Communications

- Replaced 35 mobile radios, 235 portable radios, and 15 base stations throughout the state.
- Replaced 22 fixed repeaters in the Ozark region. The equipment replacement has resulted in significantly improved mobile and portable radio coverage in areas served by the tower site.
- Improved radio coverage by adding new towers at McCormack (Bob Brown) CA, Columbia Bottom CA and Price Bridge Access and upgraded existing towers at Platte Falls and Warrenton. Improved lightning protection will also be installed at these sites. Issued frequency coordination and FCC license requests for each of the sites added.
- Installed a wireless office link for the radio system at the regional office in Kirksville.
- Completed the installation of new Protection repeater at Bennett Springs and a new Protection and common network repeater at Novelty.
- Established a new standard portable radio for Department staff. After a field trial, members of a Quality Action Team selected the Icom F30-GS as our standard issue portable radio.
- Completed a two-day on-site training course on Norstar telecommunications systems for the electronic technician staff.
- Completed a major telecommunications voice and data network-wiring project during the remodeling of the Southeast Regional office.
- Completed the removal of a 140 foot self-supporting radio tower at Six Flags forestry and placed the tower in storage for future use at the Columbia Bottom maintenance facility.
- Completed a cooperative agreement with the Missouri Department of Transportation to share the new Columbia Bottom radio tower when the tower is built on the new site.
- Completed construction of small, freestanding towers for base stations at the Warrenton and Ava Forestry offices.
- Acquired 6 new equipment shelters for radio tower sites. These were installed at Hurley, Hunter, Guthrie, Novelty, Homeland, and Strafford.

Planned Projects

In the first half of 2003, IT will focus on completing all remaining projects approved in the FY 03 budget and begin preliminary planning for the department's FY 04 Technology Budget. The remaining FY 03 projects include:

- Upgrading additional mobile relays to narrow band capability or other formats as permitted by the FCC.
- Improving Internet security for MDC's web-based software by implementing Secure Socket Layer (SSL) equipment from Cisco. This equipment is an addition to the firewall, not a separate server and will require SSL cards in several of our servers.
- Developing software applications approved by Division Administrators in the FY 03 Technology Budget Review including, Tree Seedling Processing, Regulations/Land web interface, Range Database web interface, Missouri Flora database, Wildlife Collector Permit, Ag Crop, Warm Water Pond Stocking and Cold Water spreadsheet for hatcheries.
- Convert additional field sites from Token-ring topology to Ethernet (Columbia Research, Columbia district, Busch, Piedmont, Eminence, Sullivan, Licking nursery and Clinton).
- Implement Windows 2000 on new servers and PCs as replacement for Windows NT 4.0 operating system.
- Establish a new standard for mobile radios by forming a Quality Action Team of reps from major divisions and engaging them in the testing and decision process.
- Develop a Telecommunications Plan that addresses the long term radio needs of the department, including additional towers as required to obtain required portable and mobile radio coverage**.**
- Upgrade Wide Area Network (WAN) backbone circuits to T-1, regional office circuits to 256K and add four sites to the WAN (Eldorado Springs, Brookfield, Salem and Shepherd of the Hills hatchery) to support Internet, Intranet and client-server applications.
- Install Local Area Networks (LAN) at four field sites (Brookfield, Eldorado Springs, Salem and Shepherd of the Hills hatchery).
- Install new VPN clients for network access via satellite for the Hunnewell hatchery and Dalton shooting Range.
- Assist Business & Support Services to implement a new automated Transportation system.

Accumulated Demand

Significant backlogs of accumulated demand exist in several functional areas within the Information Systems area.

- Development of phase 2 of the web-enabled Human Resources supplemental system which will provide additional functionality, including training records, applicant tracking, web-based benefit enrollment and drug testing.
- Continue upgrading our GroupWise email system by converting to GroupWise 6.2.
- Continue effort to convert from Token Ring to Ethernet topology at various field offices that are undergoing remodeling or new construction.

General Department Profile (2002)

Department Name
Missouri Department of Conservation

Street Address	City	Zip
2901 W. Truman Blvd *P. O. Box 180*	*Jefferson City*	*65102*

Main Phone Number	Main Fax Number	Website URL
573-751-4115	*573-751-4467*	www.conservation.state.mo.us

Department Director
John Hoskins

Number of FTE (entire department)	Approximate number of citizens served
1,475	*6,000,000*

Agency Mission (brief statement)
To protect and manage the fish, forest, and wildlife resources of the state; to serve the public and facilitate their participation in resource management activities; and to provide opportunity for all citizens to use, enjoy, and learn about fish, forest, and wildlife resources.

Department CIO and IT Division Profile (2002)

Department Name		
Missouri Department of Conservation		
Department CIO Name		
James Poole		
Street Address	City	Zip
2901 West Truman Blvd, P. O. Box 180	*Jefferson City*	*65102*

CIO Phone Number	CIO Fax Number	E-Mail Address
573-751-4115 (x3578)	*573-751-4865*	*poolej@mdc.state.mo.us*

CIO Membership in Professional Associations – Leadership Role Involvement (i.e., NASCIO – serve on architecture standards committee)	
Conservation Business Managers Association (CBMA)	
IT Division Name	Website URL
Information Technology	

Number IT FTE (located in central office)	Number IT FTE (located in field)
36	*11*
Total $$ value of FY03 IT requests submitted to OA Budget and Planning	Total $$ value of FY03 IT requests funded
$0	*$2,505,969 (IT Internal Budget)* *$2,749,437 (Dept Technology Budget)*

Security Officer Name	Phone No.	E-mail
Doug Young	*X3112*	youngd@mdc.state.mo.us
Privacy Officer Name	Phone No.	E-mail
ITAB Alternate Name	Phone No.	E-mail
Jim Lundsted	*X3270*	lundsj@mdc.state.mo.us
SDC Steering Committee Rep Name	Phone No.	E-mail

Department Technology Profile (2002)	
Department Name	
Missouri Department of Conservation	
Main Processors (IBM 390 with MVS, UNIX AIX, UNIX Sun, etc.)	
Mainframe	
PC Servers	*Intel Pentium with Windows NT Server /Windows 2000/Netware 5.1*
Mid-range	*AS/400 with OS/400*
Networked	
Desktop (Windows XP, 3270, Linux, etc.)	
PC	*Windows 2000*
Dumb terminal	
Network Protocols (TCP/IP, SNA, IPX, etc.)	
TCP/IP	
Internet Connections (DSL, Cable, Dialup, etc.)	
Frame Relay & RAS Dialup	
Internet Service Provider (MORENET, AOL, etc.)	
MORENET	
Security Provisions (packages, anti-virus, filters)	
Network	*Pix Firewall, Cisco Intrusion Detection, Norton AV, MIMEsweeper, PornSweeper*
Desktop	*Norton AV,*
Internet	*Websense*
Help Desk Packages (Magic, GWI)	
Magic Service Desk	
Database Management Systems (DB2, Oracle, SQL, etc.)	
DB2, Oracle, SQL Server	
Development Tools (COBOL, CICS, Advantage:Gen, Websphere, .NET, etc.)	
COBOL, Visual Basic, Visual InterDev, Microsoft Access	
E-Mail Packages (Exchange, Lotus Notes, etc.)	
Novell GroupWise	
Encryption Packages (SSL, PGP, etc.)	
SSL	

Version Control Packages (Source Safe, Panvalet, InterSource, etc.)
Telecommunications (T1, Frame Relay, etc.)
Frame Relay
GIS (ArcView, MapInfo)
ArcView, ArcInfo, ArcIMS

Department of Corrections

Accomplishments

Information Systems Infrastructure

As recommended by the 1999 Information Systems Infrastructure Review and the subsequent 2000 DOC Architecture Review, an infrastructure related decision item was submitted for funding for the 2003 fiscal year. The funding requested would have supported several of the recommendations made in the study. These recommendations included:

- Replacement of obsolete network and workstation technology
- Upgrade of data network wiring
- Implementation of data warehouse and user query capabilities
- Replacement/upgrades of legacy applications focusing on implementation of workflow and advanced application technologies
- Upgrade of existing AS/400 computing platforms

Because the fiscal year 2003 funding request was not approved, there was no progress made relating to the technical infrastructure issues that the 1999 study identified. Most information systems-related activity during 2002 focused on maintenance of the current infrastructure and existing applications. This approach will continue through all of 2003 and at least the first half of 2004. Assuming that funding becomes available in the FY05 budget, efforts in the second half of 2004 will focus on the aggressive implementation of the recommendations contained in the study.

Computer Applications

During 2002 eighty-six enhancements were made to the department's Offender Management System (OPII). These additions were made at the direction of a user steering group, the Information Quality Task Force, which meets on a regular basis to review and give direction regarding this key computer application.

The Medical Assessment and Reporting System (MARS) was also enhanced with several major changes that are currently being tested and will be placed in production in 2003. These include expansion to the medication subsystem to distinguish between current and historical medications; addition of offender lay-in and restriction information; and, revisions to the personnel security subsystem in order to interface with the Staff Common Files.

Two new applications were developed and implemented during 2002: Visitation Management and Injury and Property Damage Reporting. In addition to these, the Training Management application that was developed in 2001 but delayed due to user-mandated changes was finally placed into production. Also implemented in 2002 were planned phase-two enhancements to the Grievance Management system that had been implemented the previous year.

The following represents some of the major application development projects that were also completed in 2002:

- Implementation of the Staff Common Files application to link personnel data in the statewide SAM II system to internal department systems and to provide for additional personnel data such as badge and internal identification numbers, and job titles.
- Development of an interface for transfer of offender identification and PIN information between OPII and the vendor supporting the offender phone system.
- Development of an interface for transfer of offender information between OPII and the vendor of the Probation and Parole Minimum Supervision system.
- Completion of the analysis phase of the electronic interface between OPII and the Criminal Records Repository at the Highway Patrol.
- Completion of the analysis phase of the Booking Management System and transition into that project's design phase.
- Implementation of major changes to the 'body status' functions of OPII.
- OPII changes to support the creation of eleven new districts and six new satellite offices for Probation and Parole, including changes to staff files for over 200 users and conversion of the supervision records of over 8,000 offenders.

Conversion from AS/400 OfficeVision

In 1999 IBM announced that the current version of the AS/400 operating system would be the last that OfficeVision will function in. OfficeVision software has been necessary to provide electronic mail and word processing capabilities to the approximate 9,000 department users who do not have access to personal computers. Because the department's obsolete network infrastructure limits its ability to migrate to more appropriate computing platforms, there are a very large number of users who will continue to require electronic mail and document processing capabilities similar to what OfficeVision has provided. Additionally, the document processing capabilities of OfficeVision have been highly integrated into the offender management application

(OPII) and the offender medical application (MARS). Because of this it was necessary to acquire and migrate to a replacement product.

In 2002 the DeskMaster and Document Integrator products were acquired to replace most of the functions of Office Vision. These products have some limitations in their word processing and document management abilities, so a Document Management System was developed to supplement these limitations. Migration to the replacement software is currently underway and transition from OfficeVision should be complete by year-end. This transition also includes a large number of modifications to the OPII and MARS systems, and minor changes to a number of other computer applications that have word processing or document management functions embedded in them.

Support of SAM II

During the first half of calendar year 2002 a significant amount of effort was placed on development of management reports out of the new statewide SAM II Financial and Human Resource system. Because of the shortage of state staff, the department continued to use contractor support to complete the development of a number of reports needed by the department for information not readily available from the system. By mid-year most of the remaining identified required reports had been developed and the department is no longer dependant on contractor support for this system.

Automated Fingerprint Identification

With the support of the Missouri Highway Patrol and Federal Grant funding the department installed Automated Fingerprint Identification (AFIS) equipment in the three reception and diagnostic centers during 2000 and 2001. This equipment was also installed in late 2002 to support the fourth reception and diagnostic center in Bonne Terre. The equipment is capable of editing fingerprints for quality and then transmitting them electronically to the Patrol's Criminal Records Division.

2002 efforts also included integration of the AFIS systems with the offender management application (OPII) so that the supporting identification information can be retrieved and made available in the record that is transmitted to the Highway Patrol.

Network Support

Two additional department locations were connected to the wide area network during 2002. New LANs, servers and workstations were installed in support of all of these. During this period 226 terminals and thin-clients along with more than 125 LAN-connected PCs were added to the network. In 2002 network staff also had to replace more than one hundred terminals or monitors because of failures.

Twelve Probation and Parole offices with over 240 workstations were relocated. Three other offices with approximately eighty devices were also moved. One new institution, the Eastern Reception Diagnostic and Correctional Center, will be opened at Bonne Terre

by year-end. Seventy-six networked PCs and 150 thin clients (terminals) are being installed to support this facility.

In 2002 the department also installed twenty-five kiosks in sixteen institutions. These kiosks enable incarcerated offenders to access banking account balances, etc., from a convenient location within the institution. Previously offenders were required to meet with their caseworker or go to the Canteen to determine balances.

Demand on the department's help desk function, the Customer Support Center, increased significantly in 2002. In 2002 there were 25,645 calls to the Support Center. This compares to 23,568 calls in 2001. Although the total number of calls remained relatively constant, work orders submitted to the Support Center increased from 4,066 in year 2000, to 6,183 in year 2001, to 12,120 in 2002. Out of these 12,120 work orders more than 7,500 required onsite support for resolution.

Other network support projects completed in 2002 include:

- Completion of the rollout of the inmate canteen point-of-sale system.
- VPN design and configuration, including installation of the VPN appliance and client software on pilot workstations.
- Enhancement of Internet monitoring and filtering capability by installation of an ISA server and software.
- Installation and upgrade of support center tracking software.
- Automation of software deployment process for department client-server applications.
- Creation of plan for Windows 2000 server migration.
- Installation of workstation software to support first phase of access to the Probation and Parole Minimum Supervision system over the Internet - 57 workstations.
- Completed user ID changes in support of Probation and Parole District creation.
- Completion of multiple deployments of SAM II client software upgrades on over 300 workstations.

Planned Projects

As in 2002, in 2003 most of the department's Information Systems focus will be on the maintenance of the technical infrastructure and existing computer applications. Major progress on the recommendations made in the 1999 Infrastructure Review and the 2000 DOC Architecture Review will be minimal until sufficient staff and funds become available in subsequent years.

Computer Applications

Because of the lack of development staff, there are no formal plans to accelerate efforts to develop applications identified in the Information Strategy Plan. However, since the department function of booking offenders into treatment programs has a direct impact on offender populations, an immediate need for an application to support offender booking has been identified and work was started on this project in early 2002. This project is currently in the design phase and full implementation of a Booking Management system, including major changes to an existing Program Tracking application, will be implemented in 2003.

Other efforts in 2003 will be placed on analysis and design of an interface to support the integration of offender data from the State Courts system into OPII. Because of the expected size and complexity of this interface and the shortage of programming staff, actual implementation of this interface will not occur until a later date.

Additional application development projects that are planned for 2003 include:

- Renaming of the Missouri State Penitentiary, including conversion of all related offender records.
- Implementation of formula changes and automation of the Salient Factor scoring tool to support the automated calculation of minimum release dates of offenders.
- Modifications to the Grievance Management System, driven by major department policy changes.
- Changes to the offender classification functions of OPII, driven by policy changes.
- Implementation of a web-based version of the Victim Notification System (VINES).

Phase two enhancements to three systems, Injury and Property Damage, Visitation Management, and Training Management, have been identified and requested for completion in 2003. These changes will be analyzed and prioritized this year, however the availability of adequate programming and testing resources will determine if these changes can be fully implemented.

Population Management

One of the greatest challenges facing the Department of Corrections is the management of the large offender population, especially given the limited resources assigned to the department. There are currently several initiatives underway relating to population management that may result in significant changes to department business processes. It is anticipated that as the recommendations relating to changes in business processes are made, there will be extensive opportunities to support these with changes to existing or implementation of new computer systems.

Recommendations from the committees conducting the reviews are due in early 2003. Although recommendations have yet to be made, the impact that these initiatives may have on current 2003 development plans will probably be significant.

Justice Integration

In 2002 the department received several requests relating to the integration of its offender information with the computer systems of other law enforcement agencies. Programming support to exchange offender information with two large police departments has begun and these interfaces will be implemented during 2003. We are in discussions with and anticipate that other law enforcement agencies will submit formal requests for similar interfaces and that these may also be developed during the year.

In addition to these data exchange requests from individual law enforcement agencies, the department is participating in the statewide Justice Integration initiative. It is expected that a number of requirements will arise from these efforts that will require application development support during 2003.

Data Warehouse

In 2002 the department acquired the software products needed to support the implementation of the planned data warehouse. The product selected for support of information retrieval and reporting on the desktop was Web-Focus. The Copy Manager product was selected for the warehouse computer to support the extraction of data from operational systems, the transfer and loading of the warehouse data structures, and the management of warehouse metadata.

A project is underway to analyze the options and to select the most appropriate methodology for data warehouse-focused development projects. In 2003 we will implement a pilot data warehouse project supporting the retrieval and analysis of information from the Grievance Management System. It is possible that a second project will also be implemented during this period but the candidate system has yet to be chosen.

Image Processing

This project involves changes to business processes and development of computer programs to support retrieval of images from cameras and incorporation into the Offender Management (OPII) database. Once implemented images such as facial photographs, scars, marks and tattoos, and evidence will be collected and stored as a normal part of the electronic offender record. These images will be available to be displayed on any capable department workstation as well as printed as a part of a paper record. Since the support of image requires PC workstation technology, this project is entirely dependent on the availability of funds to upgrade the data communications networks within department institutions.

In 2002 the department made some progress relating to the incorporation of offender images into the central database. Much of the design and programming for a pilot implementation was completed. Because of the restrictions of the current data network and lack of staff the department has been unable to further implement this pilot. In 2003 we plan to continue the work but the inability to obtain funding for the required staff and technology will likely prohibit significant progress on this project.

Network support

A number of activities relating to the data network have already been identified as 2003 projects. These include the following:

- Migration to Windows 2000 Server software on over 100 servers.
- Installation of LANs and over 200 workstations in eleven new Probation and Parole district offices and six new satellite offices.
- Relocation of an estimated ten Probation and Parole offices and 200 workstations.
- Installation of network equipment and workstations in the remaining housing units at ERDCC.
- Installation of seventeen inmate-accessible Kiosks in six institutions.
- Implementation of extended firewall function and ISA filtering of Internet access.
- Pilot implementation of Long Reach Ethernet capabilities in institutions that have sub-standard data wiring.
- Begin major upgrades to Probation and Parole networks in 89 sites, including replacement of 31 servers, upgrades to 40 servers, replacement of 90 switches, replacement of 1,049 workstations and upgrades to 538 workstations.
- Deployment of VPN capability and workstations to twenty Probation and Parole locations that do not currently have network access.
- Completion of second phase of the implementation of the Probation and Parole Minimum Supervision system by installing Internet connection capability on 115 workstations.
- Completion of third phase of the implementation of the Probation and Parole Minimum supervision system by installing sound capability on 172 workstations.
- Deployment of Outlook mail capability to an estimated 1,200 Probation and Parole staff and workstations.
- Implementation of software auditing capabilities on approximately 2,800 department network-connected workstations.
- Development of a migration plan to Windows XP.

In addition to the projects above, we expect to spend considerable time defining a multi-year operational strategy relating to the replacement of obsolete workstation and network technology within the department. For three years the department has been unsuccessful

in obtaining funding to upgrade its obsolete and high-risk data networks. Essential network equipment is grossly outdated and most is no longer capable of supporting current software and hardware technologies. Because it was not funded in a timely fashion, the manageable migration to replacement technologies that was recommended in the 1999 Infrastructure Review is no longer possible. As the result we will be forced to accomplish this migration in a much shorter timeframe and at much higher costs and risks. The operational strategy that will be developed will focus on minimizing these costs and associated risks, while accomplishing the task in a much shorter period of time.

Accumulated Demand

Significant backlogs of accumulated demand exist in several functional areas within the Information Systems area.

Applications Development

In applications development there are 488 enhancements pending for the Offender Management system (OPII) alone. These enhancements represent requests that have been approved and prioritized. A number of other requests have been placed in a 'holding file' for consideration at some later date. At current staffing levels and assuming that no additional work materializes, these OPII requests represent five years of backlogged work.

In addition to the OPII backlog, there are eleven major changes pending for the Offender Medical system. Because of the magnitude of these proposed changes and the limited staff available to support the medical system, these eleven requests will require three years to complete.

Additionally, there are forty-one business systems identified in the department's Information Strategy Plan. All of these represent potential candidates for new computer applications. Assuming that staff shortages are not alleviated, we anticipate little progress in the development of new computer applications to support these business areas.

Network Support

For 2002 there was a monthly average of 166 backlogged service requests that required onsite support. For the last three months of the year, this average increased to 222. The current backlog represents four months of work. This number represents an increase of more than 70% over the previous year. Given the current staffing levels it is likely that this backlog will continue to grow. Additionally, the demand for installation and support of networked PCs has been artificially constrained due to the severe limitations of the data networks within institutions. If the department manages to begin to upgrade these networks a significant growth in PC workstations and related support requirements would naturally follow.

Other factors impacting the network support workload include the increasing need for support of obsolete technology. Currently over two-thirds of the workstations connected to the department's network are three or more years old. Three fourths of the servers are obsolete. The accepted life cycle for these device types is three years. During 2003 this percent of obsolescence will grow. Unless funding for replacement technology is received, the support required by these devices due to age and failure rate will increase significantly.

Another major factor that impacts the workload in this area is the replacement of obsolete terminal devices. Computer vendors no longer manufacture the terminal devices traditionally used by the department. As replacement devices are required, these are now being acquired from the used market. There are currently more than 3,500 terminal devices installed on our network. We anticipate that the failure rate of these will continue to rise and the replacement workload will grow accordingly. This problem will remain with the department until funding is received that supports the implementation of newer network technology and the replacement of these old terminal devices.

User Training

Due to the high turnover in the department, an insufficient number of trainers and the introduction of new applications and systems, there is a significant backlog in training of users on department computer applications. The offender management system alone has a four-year backlog for staff training. Approximately 85% of the 11,000 system users of OPII have not received required refresher training. Other applications such as Visitation Management, Grievance and the new Desk Master software will require two years to train the approximately 2,000 prioritized users. And, aside from the initial 1,200 high-priority users of Desk Master, there exist another 8,000 staff with a lower priority training need. We cannot estimate a realistic timeframe for these users and assume training will occur over the next three to five year period. None of these estimates include additional training requirements that will come up as the result of staff turnover and implementation of changed and new applications.

General Department Profile (2002)

Department Name
Missouri Department of Corrections

Street Address	City	Zip
2729 Plaza Dr	*Jefferson City, MO*	*65102*

Main Phone Number	Main Fax Number	Website URL
573-526-6502	*573-751-4099*	*www.corrections.state.mo.us*

Department Director
Gary B. Kempker

Number of FTE (entire department)	Approximate number of citizens served
10,696.43	*5,595,211 (entire state population)*

Agency Mission (brief statement)
The DOC with victims, communities and state and local governments improves public safety through humane confinement and effective community intervention. Through our cooperative efforts to provide effective correctional services, we hold offenders accountable for their behavior and prepare them to be productive citizens.

Department CIO and IT Division Profile (2002)

Department Name		
Missouri Department of Corrections		
Department CIO Name		
David L. Schulte		
Street Address	City	Zip
2729 Plaza Dr.	*Jefferson City, MO*	*65102*

CIO Phone Number	CIO Fax Number	E-Mail Address
573-526-6452	*573-522-2274*	*dschulte@mail.state.mo.us*

CIO Membership in Professional Associations – Leadership Role Involvement (i.e., NASCIO – serve on architecture standards committee)
N/A

IT Division Name	Website URL
Information Systems	*N/A*

Number IT FTE (located in central office)	Number IT FTE (located in field)
44	*13*

Total $$ value of FY03 IT requests submitted to OA Budget and Planning	Total $$ value of FY03 IT requests funded
$14,002,219	*$6,885,628*

Security Officer Name	Phone No.	E-mail
N/A		
Privacy Officer Name	Phone No.	E-mail
N/A		
ITAB Alternate Name	Phone No.	E-mail
R.P.Campbell	*573-526-6614*	*pcampbell@mail.doc.state.mo.us*
SDC Steering Committee Rep Name	Phone No.	E-mail
N/A		

Department Technology Profile (2002)	
Department Name	
Missouri Department of Corrections	
Main Processors (IBM 390 with MVS, UNIX AIX, UNIX Sun, etc.)	
Mainframe	*N/A*
PC Servers	*WinNT*
Mid-range	*AS/400*
Networked	
Desktop (Windows XP, 3270, Linux, etc.)	
PC	*WinNT*
Dumb terminal	*5250 and thin clients (networked workstations)*
Network Protocols (TCP/IP, SNA, IPX, etc.)	
TCP/IP and SNA	
Internet Connections (DSL, Cable, Dialup, etc.)	
WAN	
Internet Service Provider (MORENET, AOL, etc.)	
MORENET	
Security Provisions (packages, anti-virus, filters)	
Network	*Symantec Norton Antivirus and Antigen*
Desktop	*Symantec Norton Antivirus*
Internet	*Pix Firewall*
Help Desk Packages (Magic, GWI)	
Track-it	
Database Management Systems (DB2, Oracle, SQL, etc.)	
DB2/400	
Development Tools (COBOL, CICS, Advantage:Gen, Websphere, .NET, etc.)	
Native RPG, Cool:Biz, Cool:Plex	
E-Mail Packages (Exchange, Lotus Notes, etc.)	
MS Exchange and Outlook (on clients)	
Encryption Packages (SSL, PGP, etc.)	
N/A	
Version Control Packages (Source Safe, Panvalet, InterSource, etc.)	

N/A
Telecommunications (T1, Frame Relay, etc.)
T1 and Frame Relay
GIS (ArcView, MapInfo)
N/A

Department of Economic Development

Accomplishments

Toolbox

Toolbox is a web-enabled application that is currently utilized by more than 1200 staff and partners at more than 250 locations. More than 1.2 million clients are currently in the system.

Additional modules of Toolbox were developed during the 2002 calendar year to continue the transition of Americas Workforce System to the Web and to add Individual Employability Plans. Modifications were made to the existing mainframe system to handle contractual requirements for METP and TANF. These modules will be added to Toolbox in 2003. The integration between Missouri Works! and Toolbox allows the Division of Workforce Development to capture customer information through the Internet reducing workload and cycle time.

Work is underway to develop a mapping system that will map the bus routes through BI-State Transit Agency for the posted Missouri Works! Jobs.

Customer Management System (CMS)

Additional modules of CMS were put into production during 2002. The system currently allows staff to track tax credits, grants, loans and bonds issued to customers. Modules were added that allow the Department of Revenue and the Department of Insurance to access the system to verify and redeem tax credits.

In 2003 additional phases of CMS we be addressed, these include Project Tracking and Client Tracking.

UI Claimant Processing

Work is underway with the Department of Labor to enhance interfaces between the UI Reporting system and Missouri Works! to assist claimants in registering for work and completing job searches. Additional functions are being added in ToolBox to enhance the job matching for UI Claimants.

Starting a New Business Web Site (MoBLIS)

This site helps Missouri citizens meet the government requirements related to starting a new business. The system walks potential entrepreneurs through a set of questions pertaining to the type of business they wish to start and returns a list of government licensing and registration requirements with links to additional information about the requirements as well as applicable forms.

Time Management System (TMS)

TMS is a web based time and attendance system. During 2002 the system was deployed further throughout the department. TMS has streamlined the leave request and approval process as well as the timesheet approval process. TMS leave data is uploaded to SAM II. Future plans include uploading work allocation data to SAM II for cost accounting purposes.

Business Continuity/Disaster Recovery Plan

The MIS unit is working with the department agencies to develop a comprehensive Business Continuity/Disaster Recovery Plan. Interviews have been held with the agencies and the plan is being developed.

PSC Electronic Filing and Information System

The PSC has implemented the Electronic Filing and Information System (EFIS), which is an integrated electronic work management system that includes document management, automated workflow, electronic filing, centralized data repository, full text search capability with fuzzy and conceptual logic and is operated through the Web browser. The accessibility of this system through the Internet makes more information available to the public, regulated utilities and stakeholders, as well as, supports high standards for productivity and consumer service. The positive impacts of this project on Missouri residents, regulated utilities, stakeholders and to the Commission and its staff are reduced costs of doing business with the PSC.

FileNET Corporation awarded the PSC with its Chief Technology Officer Award for innovative solutions. The PSC was selected over 950 other U.S. companies as well as companies representing 25 other countries.

Open Source

Portions of the Department of Economic Development have been utilizing Free software and Open Source for many years. While not new to DED, many businesses and government shops are moving to Open Source and Free software for certain tasks. The benefits of Free and Open Source software are not manifested in the cost, but in the quality, flexibility, and support of the software.

Over the past year, DED has moved our public web presence away from proprietary software and put the development, staging, and production department Internet site on Open Source software.

- Some databases have been migrated from proprietary solutions to Free software alternatives.

- Intrusion detection systems have been rolled out, again using Open Source software.
- Firewalls using Open Source software are beginning to be deployed.
- Internal software development over the past year has been heavily reliant on Free and Open Source language implementations, compilers, and interpreters.

Optical Imaging

The Missouri Division of Professional Registration has successfully implemented a new optical imaging system during 2002. All of the boards in the division have been trained on how to use the system. They have the ability to scan daily mail received or other paper files and documents maintained in the board office. The system is flexible enough to all the boards to determine what documents are to be scanned. The system is fully operational and in production for the entire Division. As of this date, the boards have scanned over 750,000 pages into the system.

Video Conferencing

The Missouri Division of Professional Registration has successfully implemented a video conferencing system. This system allows the Division to broadcast both live and archived board meetings and to do video conferencing to anywhere. By utilizing the system, board meetings are more accessible to their intended audiences without requiring travel. The Division also archives past meetings and made them available to interested parties for viewing at their convenience.

Automated Board Agendas

The Missouri Division of Professional Registration has implemented a system to produce board agendas and related documents in digital format instead of on paper. This allows the boards to fully archive in searchable formats their board meetings. The agendas are capable of being produced via the optical imaging system as well as from other sources. This allows the boards to produce a single compact disc for each board member instead of an immense paper agenda. Some of the early adopters of this system will see cost savings in excess of $8000 per year per board. This has also allowed the board to retain previous agendas as well as search much larger volumes of information when attempting to make decisions on board related issues.

Planned Projects

On-Line Financial Applications

There currently are not standard applications or one place to obtain all forms for the Department of Economic Development Financial programs. There is a need to develop a web-based system to provide this function. Plans are to develop a system that will accept and store the electronic applications.

On-Line Renewals
The current process for renewing licenses with the Division of Professional Registration is labor intensive and slow. Renewal forms are sent to licensed professionals through the postal service. Once received, the licensed professional completes the form and returns it to the Division of Professional Registration where the form is reviewed, the information is entered into the licensing system and a license is issued. This system will allow licensed professionals to renew their licenses via the Internet eliminating a number of steps from the process and reducing cycle time.

Based on preliminary information it is estimated that 98,088 licensed professionals would use the online renewals with an estimated state savings of $98,088 and customer savings of $980,880.

PSC Integration Project
The Integration Project is charged with rewriting the PSC's Exhibit Manipulation System (EMS). EMS has been one of the tools used by the PSC to help set rates and to determine cost incurred by utility companies to provide service. This new "Integrated" system will link the data modeling functions of EMS, Rate Design, and Billing Determinant activities as well as provide PSC staff queuing to help prepare for testimony presented in cases brought to the Commission. Having a centralized data repository and the integration of these processes and systems, the PSC will be more efficient therefore accomplishing the goal of reducing costs of doing business with the PSC.

The PSC is currently in the design stage of this project.

Visual Age Replacement
Due to Visual Age being removed from the State Data Center Cost Allocation Plan and limited usage still in DED, MIS will be working to move the needed systems to a server-based platform.

WAN Upgrade
With the increasing use of web applications, there is a need to increase the speed of the DED WAN. MIS will be working on upgrades to the network including line speed increases and completing conversion from token-ring to Ethernet.

Accumulated Demand

Internet Processes and Internet Marketing
There continues to be a push to move more and more of the department's processes to the Internet. Demand exists to further develop the department's Internet sites to enhance the department's marketing efforts.

There are always requests for enhancements to existing systems. As the speed of business increases so does the demand for the deployment of new sites and

enhancements. Likewise, there is significant pressure to continually shrink the amount of time between articulation of the initial concept to full deployment.

General Department Profile (2002)

Department Name
Economic Development

Street Address	City	Zip
301 West High	*Jefferson City*	*65102*

Main Phone Number	Main Fax Number	Website URL
573-751-4962	*573-751-7258*	www.ded.state.mo.us

Department Director
Joseph Driskill

Number of FTE (entire department)	Approximate number of citizens served
1619	*Universal (International Marketing, Missouri Works!)*

Agency Mission (brief statement)
We will achieve our vision by stimulating and supporting economic security, opportunity, growth and a high quality of life in Missouri communities.

Department CIO and IT Division Profile (2002)

Department Name		
Economic Development		
Department CIO Name		
Cathy Reinkemeyer (Interim)		
Street Address	City	Zip
421 East Dunklin	*Jefferson City*	*65101*

CIO Phone Number	CIO Fax Number	E-Mail Address
573-751-5466	*573-751-1217*	Creinkemeyer@ded.state.mo.us

CIO Membership in Professional Associations – Leadership Role Involvement (i.e., NASCIO – serve on architecture standards committee)

IT Division Name	Website URL
Management Information Systems	

Number IT FTE (located in central office)	Number IT FTE (located in field)
43	*13*
Total $$ value of FY03 IT requests submitted to OA Budget and Planning	Total $$ value of FY03 IT requests funded
$675,000	*$675,000*

Security Officer Name	Phone No.	E-mail
BJ Atchison	*573-751-0435*	*Batchison@ded.state.mo.us*
Privacy Officer Name	Phone No.	E-mail
ITAB Alternate Name	Phone No.	E-mail
SDC Steering Committee Rep Name	Phone No.	E-mail
Jayne Wack	*573-751-5461*	Jwack@ded.state.mo.us

Department Technology Profile (2002)	
Department Name	
Economic Development	
Main Processors (IBM 390 with MVS, UNIX AIX, UNIX Sun, etc.)	
Mainframe	
PC Servers	*NT, Linux, FreeBSD, OpenBSD*
Mid-range	
Networked	
Desktop (Windows XP, 3270, Linux, etc.)	
PC	*Windows 95, 98, NT, 2000, XP, Linux, MAC*
Dumb terminal	
Network Protocols (TCP/IP, SNA, IPX, etc.)	
TCP/IP, SNA	
Internet Connections (DSL, Cable, Dialup, etc.)	
DSL, Dialup	
Internet Service Provider (MORENET, AOL, etc.)	
MORENET, Socket	
Security Provisions (packages, anti-virus, filters)	
Network	*Router based access list, IPFW, IDS, PPTP, IPSEC, SSH*
Desktop	*Norton*
Internet	*Same as "Network"*
Help Desk Packages (Magic, GWI)	
McAfee Helpdesk	
Database Management Systems (DB2, Oracle, SQL, etc.)	
Oracle, SQL, Sybase	
Development Tools (COBOL, CICS, Advantage:Gen, Websphere, .NET, etc.)	
COBOL, SAS, Visual Age, Vision Builder, CICS, PL/SQL, VB, PERL	
E-Mail Packages (Exchange, Lotus Notes, etc.)	
Exchange, SendMail	
Encryption Packages (SSL, PGP, etc.)	
SSL, SSM, PPTP, IPSEC	
Version Control Packages (Source Safe, Panvalet, InterSource, etc.)	

CVS
Telecommunications (T1, Frame Relay, etc.)
T1, Frame Relay, MAN
GIS (ArcView, MapInfo)
ArcView

Dept. of Elementary and Secondary Education

Overview

The Department of Elementary and Secondary Education (DESE) continued the development effort that will allow the department to interact with public school districts through worldwide web applications. Many of the core data gathering processes have been automated, providing for a faster collection process. DESE looks to provide data marts for these systems over the next few years in order to make it easier for reporting. We also continue to upgrade our technical infrastructure in order to provide the best service to our users.

Accomplishments

Annual Performance Report

The Annual Performance Report (APR) is an indicator of a school district's performance. In the past, these reports were produced on paper and mailed to the school districts and were available only at the district level. This year, the APR was produced at both the building and district levels and is available on the DESE Web Application Menu for viewing by the school districts and the general public.

School Food Services – Summer School; Revenue & Expense

This calendar year saw the implementation of the Summer School application and claim for the School Food Services Child Nutrition system. This was an extension of the regular term collection system for public and non-public school districts to submit their information about the number of students fed in various programs for reimbursement by the U.S. Department of Agriculture. In addition, the Revenue and Expense form, required by law, has been converted to a web report form for public and non-public schools to complete and submit to DESE.

Reauthorization of Federal Entitlement Grant programs

The No Child Left Behind legislation recently passed by the federal government included the reauthorization of several entitlement grant programs, the addition of 3 new grants, and the end of 3 other grants. Consequently, several changes were necessary to existing

web application to update the data items being collected and new applications for the 3 new grants had to be added to the web system.

User Manager

Enhancements of the security system used by the school districts were completed in April of 2002. Districts must still designate two (2) authorized individuals by completing a paper form and sending that to the DESE Security Administrator. Beyond that, however, all security for the DESE Web Applications can be controlled by the authorized individuals at the school district. This allows for greater flexibility and faster response time when dealing with staff turnover or position changes in the school districts.

Perkins Accountability

Districts participating in the Carl D. Perkins III grant must submit certain enrollment and performance data. These data are reviewed and used in conjunction with the following year's application to ensure funds are being distributed in the areas needed. In addition, the submission and proper use of funds are used in determining distributing or holding of payments. These data also are used in annual reporting to the Vocation and Adult Education division of the federal government. Previously, these data were collected on Excel spreadsheets, retyped into an Access database from which reports were run.

Special ED Compliance Monitoring System

The Special Education Compliance Monitoring system was developed to allow DESE Special Education Supervisors to monitor and help school district's special education programs. This system tracks the school district's special education programs in order to determine if they are following all federal and state laws and regulations. The systems automatically flags problems and will generate letters to districts. The system allows the special education supervisors to work with it while in the field reviewing the district's program. This system replaces a mainframe system that needed to be modified and updated. The system reduces the need for data entry and has reduced the time spent monitoring a special education program.

ACES System

The ACES system collects GED results for all the Adult Education Centers across the State of Missouri. The Division of Vocational and Adult Ed determines the funding and success of the centers using this data.

Onsite MSIP Review System

This system allows Missouri School Improvement Program (MSIP) Team members to enter MSIP onsite review information at the District. In the previous year, the information was entered on paper forms and then re-entered into an Access database. The process was slow and cumbersome. This year the process has decreased data entry time, data entry errors and review time. The previous system required the use of part time staff to retype the information into an access database. Supervisors and other DESE staff can review the information in a timelier manner and it allows for the MSIP review process timeframe to be shorted.

Infrastructure Updates
During the period DESE completed an Oracle upgrade to version 8.1.7 and an Advantage Gen upgrade to version 6.0. The mainframe operating system was upgraded to version VSE 2.5.2.

Data Marts
Data marts were initially created for the Special Education's Early Childhood program (ECSE). A mart was also completed for the DESE Census of Technology program (COT). These data marts will allow users easier access to collected data for ad hoc reporting.

Planned Projects

Teacher Certification
Implementation of the re-designed application is planned prior to the beginning of 2003-2004 school year beginning in August. In addition to the previous features of the system, several more professional conduct features have been added such as automatic checking for revocations of certificates in other states and a more firm connection between the substitute certificate system and the main certification system.

Profile System
A profile of key indicators at the district level has historically helped in the production of certain reports such as school district Report Cards, and provided information both at the state and federal level. With accountability being taken to the school building and even teacher, level, the current Profile System no longer serves the purpose for which it was intended. This system will be analyzed and re-written to provide more useful information in various formats by the end of calendar year 2003.

State Special Education Payment
Due to changes in the way data used in this payment is collected, the process of making this payment has become very manual intensive for both the business and Information Technology sections, requiring up to 50-75% of up to 5 people's time for 2 weeks out of each month. A method of making this payment more automated and less complex has been analyzed and is the highest priority, after current projects, on the list of projects for Information Technology. This will reduce the manual effort and will free up resources for more productive activities.

Core Data Collection – FTP upload, Reports, Edits
The main portion of the Core Data Collection system was completed in calendar year 2002. This project will enhance the current web pages to allow for FTP uploads of data, online reports, and online edits of the data. The FTP uploads will help districts with large volumes of data to avoid significant time in data entry by allowing them to download information from their local systems and upload the data directly to DESE. Online edits will be performed on each screen at SAVE and SUBMIT time to help eliminate errors in

data. Reports will be made available online for the convenience and use of the school districts.

Vocational and Adult Education Salary Reimbursement

In an effort to make the distribution of monies in the Vocational and Adult Education State Salary Reimbursement more equitable, the calculation for reimbursement has changed. For Area Vocational Tech Schools the reimbursement will be based on enrollment. For Comprehensive schools the time devoted will be the base for the reimbursement. Both are dependent on *approved* courses and certified FTE. In the past some of these criteria had to be determined manually. This project will further automate the process so as to free time from the program areas to be used to help and advice the schools rather than determine payment amounts.

Accumulated Demand

There are currently 30 New Development requests, 25 Product Enhancement requests, and 4 System upgrade requests on the Project Request List for DESE. Of these requests, 5 New Development, 2 System upgrade, and 4 Product Enhancements are currently underway. Three to five more items are anticipated to be started and/or completed by the end of fiscal year 2003. If no other projects were requested, it is anticipated that the current demands would take approximately 3 to 5 years to complete with current staff.

General Department Profile (2002)

Department Name
Department of Elementary and Secondary Education

Street Address	City	Zip
205 Jefferson St.	*Jefferson City*	*65102*

Main Phone Number	Main Fax Number	Website URL
573-751-4212	*573-751-8613*	*http://www.dese.state.mo.us*

Department Director
D. Kent King - Commissioner

Number of FTE (entire department)	Approximate number of citizens served
2500	*Approx. 75% of the citizens of Missouri. We directly serve the 524 public school districts in the state.*

Agency Mission (brief statement)
The Department of Elementary and Secondary Education is a team of dedicated individuals working for the continuous improvement of education and services for all citizens. We believe that we can make a positive difference in the quality of life for all Missourians by providing exceptional service to students, educators, schools and citizens.

Department CIO and IT Division Profile (2002)

Department Name		
Department of Elementary and Secondary Education		
Department CIO Name		
Paul G. Wright		
Street Address	City	Zip
205 Jefferson St.	*Jefferson City*	*65102*

CIO Phone Number	CIO Fax Number	E-Mail Address
573-526-7363	*573-526-4125*	*pwright@mail.dese.state.mo.us*

CIO Membership in Professional Associations – Leadership Role Involvement (i.e., NASCIO – serve on architecture standards committee)
MoVAP Committee, MOTEC Vice-Chair, Jefferson City Information Technology Coalition (JCITC)

IT Division Name	Website URL
Information Technology	*www.dese.state.mo.us/divadm/infotech*

Number IT FTE (located in central office)	Number IT FTE (located in field)
22 (DESE Central Office)	*27 (Vocational Rehabilitation Office-JC)*
Total $$ value of FY03 IT requests submitted to OA Budget and Planning	Total $$ value of FY03 IT requests funded
0 (No requests made.)	*0*

Security Officer Name	Phone No.	E-mail
Steve White	*573-751-9821*	*swhite@mail.dese.state.mo.us*
Privacy Officer Name	Phone No.	E-mail
ITAB Alternate Name	Phone No.	E-mail
Diana James	*573-751-4478*	*djames@mail.dese.state.mo.us*
SDC Steering Committee Rep Name	Phone No.	E-mail

Department Technology Profile (2002)	
Department Name	
Department of Elementary and Secondary Education	
Main Processors (IBM 390 with MVS, UNIX AIX, UNIX Sun, etc.)	
Mainframe	*IBM S/390 running VSE 2.7*
PC Servers	*Windows 2000*
Mid-range	*UNIX (AIX)*
Networked	*Windows 2000*
Desktop (Windows XP, 3270, Linux, etc.)	
PC	*Windows XP, Windows 2000*
Dumb terminal	
Network Protocols (TCP/IP, SNA, IPX, etc.)	
TCP/IP	
Internet Connections (DSL, Cable, Dialup, etc.)	
ATM	
Internet Service Provider (MORENET, AOL, etc.)	
MORENET	
Security Provisions (packages, anti-virus, filters)	
Network	*Norton Anti-virus, Snort*
Desktop	
Internet	*Norton Anti-virus, ISA Server, Snort*
Help Desk Packages (Magic, GWI)	
Magic	
Database Management Systems (DB2, Oracle, SQL, etc.)	
Oracle 8.1.7	
Development Tools (COBOL, CICS, Advantage:Gen, Websphere, .NET, etc.)	
COBOL, CICS, CSP, Advantage:Gen, .NET	
E-Mail Packages (Exchange, Lotus Notes, etc.)	
Exchange	
Encryption Packages (SSL, PGP, etc.)	
SSL	
Version Control Packages (Source Safe, Panvalet, InterSource, etc.)	

Source Safe
Telecommunications (T1, Frame Relay, etc.)
T1 and Frame Relay
GIS (ArcView, MapInfo)
ArcView

Department of Health and Senior Services

Accomplishments

Emergency Response Preparedness

Much of the information technology effort this year in the Department of Health and Senior Services (DHSS) was directed at technology that would enable DHSS to respond more rapidly and effectively to a health emergency, particularly a terrorist attack. Following are the projects DHSS has initiated or completed to enable it to respond better to a state emergency.

DHSS enhanced the capabilities of the Missouri Health Strategic Architectures and Information Cooperative (MOHSAIC) disease surveillance system to include:

- DHSS implemented an Emergency Response Data Collection System (ERDCS) to record, track and report on any information about an emergency situation or the potential for an emergency situation received by DHSS.

- DHSS expanded and web-enabled an inventory management system to track the national pharmaceutical stockpile (NPS) inventory.

- DHSS began development of a central repository for smallpox vaccinations. The system will include the ability to report and track adverse reactions to the vaccine. The system will be implemented in early 2003 when the state begins offering the vaccine to healthcare first responders. The system will be eventually be used for all citizens who wish to be vaccinated for smallpox.

- DHSS purchased an Emergency Notification System that will enable DHSS to automatically call health care providers during a health emergency. The system will contain home telephone numbers, cell phone numbers, and pager numbers of private and public health care providers across the state. The system will be able to notify all providers in the state or selected groups by specialties or location. The system will automatically redial numbers until it gets a response from at least one of the provider's numbers. This system supplements DHSS e-mail and broadcast fax notification capabilities that were implemented two years ago.

DHSS' broadcast fax was expanded this year to allow it to be used by emergency programs of other state departments, such as the Amber Alert program.

- Working with the Missouri Hospital Association, a system was implemented that keeps track of empty hospital beds so that DHSS will be able to identify the closest available beds during an emergency.

- DHSS developed an interface that will accept hospital laboratory data and analyze it for trends that could indicate a disease outbreak or bioterrorism attack. DHSS also contracted with a private company to go into hospitals and develop a system to extract the laboratory data from each hospital's client tracking system and to submit the data electronically to DHSS in a common format. DHSS will begin receiving data from the larger state hospitals in early 2003.

- DHSS has developed an active syndromic surveillance system. The Missouri hospitals are reporting to local public health authorities the number of patients admitted with seven complaints—gastrointestinal illness, hemorrhagic disease, respiratory illness, neurological illness, rash illness, fever illness of unknown origin and chemical exposure with sudden onset. The data are manually tabulated by the hospitals on a daily basis and the information is called or faxed to the local public or district health agency three times per week. The data are entered into a state database to determine if there has been an increase in admissions beyond the expected level for one of the syndromes.

- In order to better respond to a terrorist attack or other health emergency, DHSS implemented a 24X7 response team. As part of the team, DHSS now has a skilled information technologist on duty at all times to assist with technology issues that might arise.

- DHSS has increased the security and availability of its network and data by purchasing additional firewalls, upgrading the uninterruptible power supply for the server computer room, implementing hot backups, testing virtual private network configurations and developing the specifications for a power generator for the computer room that will be purchased in 2003. DHSS also contracted with a private company to do a network vulnerability test to determine the weak links in the department's network.

- DHSS began design of a public health metadirectory that will serve as the directory health care providers that may need to be alerted during an emergency as well as a directory for user authentication to DHSS data.

- DHSS established a Department Situation Room that will serve as single point of coordination for all DHSS activities related to an emergency. The room is equipped with computers and satellite communication devices.

- DHSS expanded and enhanced their video conferencing capabilities to add sites and improve performance. Among other users, video conferencing is used to train local public health agencies in terrorism response.

Organ Donor System

DHSS enhanced the web-based Organ Donor system to provide better access. DHSS also provided redundant access points to reduce down time and added 24X7 help desk support for the program to ensure that the information is available when needed. There have already been a number of cases where the system assisted the family of a deceased person make the decision to donate organs.

MOHSAIC

During 2002, the Department continued its progress on developing and implementing a statewide, integrated public health system, the Missouri Strategic Architectures and Information Cooperative (MOHSAIC). MOHSAIC is recognized as the nation's most fully integrated public health system and has been written up in a national public health journal and a chapter of a new health informatics textbook is used to describe DHSS' experience in developing and implementing MOHSAIC. Major MOHSAIC accomplishments this year include:

- The Service Coordination application was enhanced to include billing services. This application provides for planning and tracking all health services provided to clients with special health care needs and includes easy entry and retrieval of all case notes associated with a client.

- The Surveillance application was enhanced to cover quality assurance functions, web-entry of reportable diseases and bioterrorism response capabilities.

- An electronic interface was developed with a major provider-billing clearinghouse to enable DHSS to obtain more complete and timely immunization data.

- DHSAS implemented a basic lead tracking system.

- DHSS secured minimal funding to begin development of a Traumatic Brain Injury (TBI) program as part of Missouri's E-Government initiative.

- DHSS implemented a Newborn Hearing Web application for hospital to report newborn hearing screening information. DHSS imports the newborn hearing information into MOHSAIC.

- DHSS expanded the Family Care Safety Register (FCSR) to include criminal background checks as mandated in 2002 legislation.

- DHSS developed and implemented an internal security application to manage user access requests to applications and network resources.

Data Warehouse

All data entered into MOHSAIC are moved to the department's data warehouse. DHSS develops subject-specific data marts to simplify the development of reports. A variety of tools are employed by users to develop reports from the data in the data warehouse, including SAS, MS Excel, MyEureka, Epi Info, and MS Access.

- WIC data was added to the data warehouse along with all new data captured in MOHSAIC.

- DHSS acquired, installed and implemented software for deduplication of data warehouse data.

- DHSS completed deduplication of the 2001 birth data loaded into the data warehouse.

Geographical Information Systems

DHSS designed and implemented MERGIS (Missouri Emergency Response GIS) department-wide to provide advanced GIS decision support tools via the web while collecting new data to be integrated in the application. MERGIS combines 71 databases into a single application allowing advanced queries, geocoding of cases\locations, buffering, hot-linked digital photography and the integration of near real-time program data. Managers and event site commanders will use MERGIS to analyze health events, assess risk to Missouri's population and better distribute resources for remediation.

DHSS implemented a GIS server with attached SAN solution to better serve the department's GIS community centrally. The SAN solution has made possible the serving of a full set of Digital Ortho Quads of the state and other enhanced satellite remote imaging. Implemented an ArcIMS solution successfully providing interactive web mapping (via the Intranet) to DHSS staff.

GIS was used as an analysis tool on high priority projects such as the West Nile study, Herculaneum Childhood Lead Poisoning study, Hematite Heavy Metals Study, St. Louis City Childhood Lead Poisoning Model, MO Immunizations Pockets of Need, Bio-Monitoring Study and during threats of anthrax contamination in Missouri post offices.

MICA

DHSS continued expanding the Missouri Information for Community Assessment (MICA). MICA is an easy to use application that runs on the DHSS Internet site for developing health profiles for Missouri communities. New data added in 2002 include: Behavioral Risk Factor Surveillance System, Cancer Registry, Medicaid Records, Temporary Assistance for Needy Families, WIC Prenatal, WIC Postpartum, and WIC Prenatal and Postpartum.

Senior Services
Senior services' staff in the county offices were still using dumb terminals at the beginning of the year. All of the dumb terminals were replaced by PCs. Also, outdated wiring used by the senior services' network was upgraded.

Vital Records
The Social Security Association contracted with DHSS to obtain verification of vital records data. DHSS developed and tested the data exchange and expects to begin operation in early 2003.

Planned Projects

- Emergency response projects planned for 2003 include implementation of the smallpox vaccine data central repository, development of a surveillance alert notification system, enhancement of our syndromic surveillance system that would include electronically extracting the hospital data rather than manually reporting the data, development of a system to tack professional training, implementation of the metadirectory, replacement of network routers to increase network functionality, implementation of the Emergency Notification System, and purchase of a power generator for the network and server computer room.

- Enhancements for MOHSAIC for 2003 include enhancements to lead screening and development of a Tuberculosis screening application, a traumatic brain injury application, and a sexually transmitted disease application.

- Enhancements for the Data Warehouse for 2003 include adding new data from new MOHSAIC applications and surveillance data received from hospitals and laboratories.

- DHSS will implement two document imaging projects in 2003. One for Family Care Safety Register and one for the Division of Nutritional Health Services.

- Deficiencies found during nursing home inspections will be listed on the Internet.

- Since the Division of Aging was transferred to DHSS, DHSS has had two e-mail systems. Groupwise is used by staff from the former Department of Health, while former employees of the Division of Aging use Lotus Notes. In 2003 DHSS will convert all employees to Lotus Notes.

- DHSS will make necessary changes to transaction data and privacy policies to ensure HIPAA compliance.

- DHSS will perform another vulnerability assessment to ensure that all deficiencies found in the 2002 assessment are corrected and to learn if any new problems have developed.

- MICA will add data from additional programs.

- DHSS will implement the data exchange of vital records data with the Social Security Administration.

- GIS planned projects include:

    - Implementing a secure Interactive Web Mapping Internet solution to enable Missouri's citizens to access approved DHSS health data and in secure situations the DHSS MERGIS application in other state agencies and first responder entities.

    - Implementing an ArcSDE solution to enhance spatial data storage and access for the user community.

    - Evaluating and possibly integrating newer MERGIS extensions.

Accumulated Demand

The following projects have been requested but are not on the schedule because of a lack of resources or incomplete information:

- Additions of the following applications to MOHSAIC: environmental health programs, cancer control, and some health inspection programs.

- A web-enabled vital records system that would allow hospitals to enter new birth information and funeral home directors to enter death information over the Internet.

- Vital records and senior services databases will need to be converted from IDMS to either Oracle or DB2.

- Although the department will convert to a single e-mail system in 2003, there are still incompatibilities between the networks used by the former Division of Aging employees and the former Department of Health employees.

General Department Profile (2002)

Department Name
Department of Health and Senior Services

Street Address	City	Zip
912 Wildwood	*Jefferson City*	*65109*

Main Phone Number	Main Fax Number	Website URL
573-751-6001	*573-751-6041*	www.dhss.state.mo.us

Department Director
Ron Cates, Interim Director

Number of FTE (entire department)	Approximate number of citizens served
2,000	*5,000,000*

Agency Mission (brief statement)
The Department of Health and Senior Services protects and promotes quality of life and health for all Missourians by developing and implementing programs and systems that provide information and education, effective regulation and oversight, quality services, and surveillance of diseases and conditions. We use strategic leadership and partnership, while promoting community participation in programs and systems, in order to accomplish outcomes and objectives.

Department CIO and IT Division Profile (2002)

Department Name		
Department of Health and Senior Services		
Department CIO Name		
Rex Peterson		
Street Address	City	Zip
920 Wildwood	*Jefferson City*	*65109*

CIO Phone Number	CIO Fax Number	E-Mail Address
573-751-6450	*573-526-7645*	peterr@dhss.state.mo.us

CIO Membership in Professional Associations – Leadership Role Involvement (i.e., NASCIO – serve on architecture standards committee)	
Association of Public Health Chief Information Officers (APHCIO)	
IT Division Name	Website URL
Center for Health Information Management & Evaluation	

Number IT FTE (located in central office)	Number IT FTE (located in field)
96	*7*
Total $$ value of FY03 IT requests submitted to OA Budget and Planning	Total $$ value of FY03 IT requests funded
$7,895,000 (Only Core Request)	*$7,895,000*

Security Officer Name	Phone No.	E-mail
Gail Morris	*573-751-6450*	morrig@dhss.state.mo.us
Privacy Officer Name	Phone No.	E-mail
ITAB Alternate Name	Phone No.	E-mail
Jim Branson	*573-751-6450*	bransj@dhss.state.mo.us
SDC Steering Committee Rep Name	Phone No.	E-mail
Faye Zumwalt	*573-751-6450*	*zumwaf@dhss.state.mo.us*

Department Technology Profile (2002)

Department Name	
Department of Health and Senior Services	
Main Processors (IBM 390 with MVS, UNIX AIX, UNIX Sun, etc.)	
Mainframe	*0*
PC Servers	*73 Windows Servers, 43 Netware Servers*
Mid-range	*37 UNIX/RS/6000's*
Networked	*All*
Desktop (Windows XP, 3270, Linux, etc.)	
PC	*2000+, Windows XP, 2000, 98, 95*
Dumb terminal	
Network Protocols (TCP/IP, SNA, IPX, etc.)	
TCP/IP, IPX, SNA	
Internet Connections (DSL, Cable, Dialup, etc.)	
MAN	
Internet Service Provider (MORENET, AOL, etc.)	
MoreNet	
Security Provisions (packages, anti-virus, filters)	
Network	*Mimesweeper, Mailsweeper, Norton Anti-virus*
Desktop	*Norton Anti-virus*
Internet	*IBM SecureWay firewall, Cisco PIX Firewall, Cisco VPN, Mailsweeper, Mimesweeper*
Help Desk Packages (Magic, GWI)	
Magic	
Database Management Systems (DB2, Oracle, SQL, etc.)	
Oracle, MS Access	
Development Tools (COBOL, CICS, Advantage:Gen, Websphere, .NET, etc.)	
COBOL, CICS, Delphi, .NET, Visual Basic	
E-Mail Packages (Exchange, Lotus Notes, etc.)	
Groupwise, NIMS, Lotus Notes (Will be converting Groupwise users to Lotus in 2003)	
Encryption Packages (SSL, PGP, etc.)	
SSL	

Version Control Packages (Source Safe, Panvalet, InterSource, etc.)
MKS Source Integrity Enterprise
Frame Relay, Point-to-Point, MAN, Wireless
GIS (ArcView, MapInfo)
Archview, ArchIMS, Network Analyse, Spatial Analyse, Sagent Geocoder, US Streetmap, ArchPAD, Trimble GPS, Teletype GIS, Archinfo

Department of Higher Education

Preface

The Department of Higher Education handles most IT projects from its core operating budget, which includes state general revenue, federal funds, and funding resulting from the administration of the Federal Family Education Loan Program (FFELP). For FY2003 the DHE received spending authority of federal FFELP funds to complete our e-government project and to upgrade our imaging system.

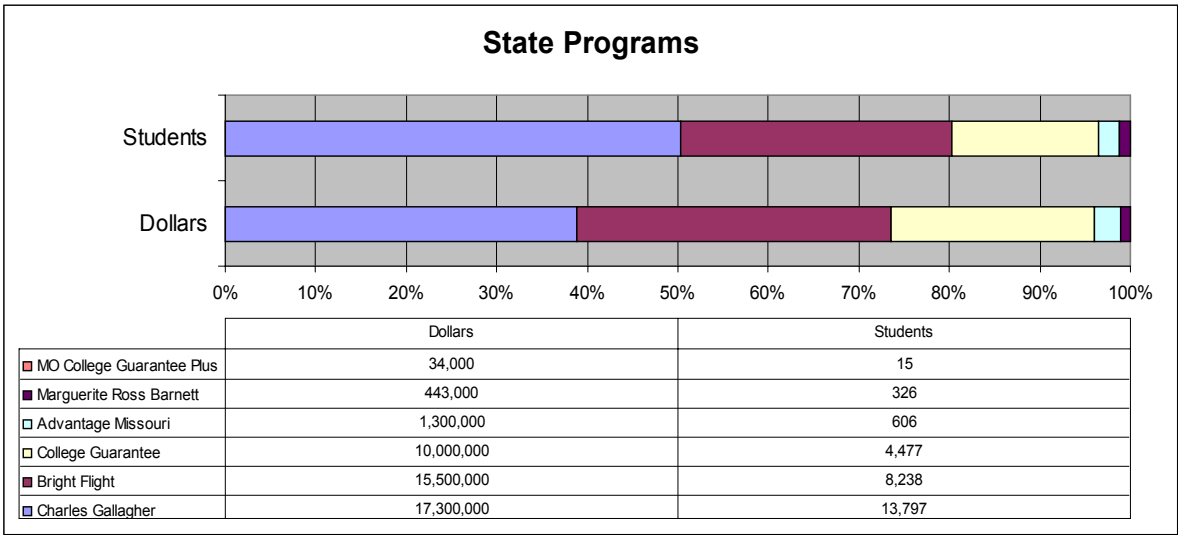
The Department of Higher Education also coordinates the development of and recommends a consolidated budget request for the state's system of higher education. IT projects supported with these budgets include MOREnet, MOBIUS, and the Missouri Learners' Network (MLN). The multi-agency collaborative appropriation to the University of Missouri-based Missouri Research and Education Network (MOREnet) funds the operation of Missouri's state education network that serves higher education, K-12 schools, public libraries, and state government.

MOREnet is a nationally recognized leader in state networking and manages a state telecommunications backbone (intranet) consisting of six redundant 155 mbps legs, 1085 mbps access to the Internet, and staffing for the Network Operations Center. This appropriation also supports customer connections (10 mbps to 85 mbps) for the 26 Missouri public higher education institutions and a 50 mbps connection to the State Data Center for state agency Internet access.

The MOBIUS Common Library Platform provides access to almost 17 million volumes for 98 percent of the students enrolled in Missouri's public and independent colleges and universities. The MLN is a web-based gateway to learning opportunities at all levels, for all age groups, in numerous subject areas.

Accomplishments

- In an effort to provide educational opportunities by providing financial assistance:
  - Facilitated disbursement of over $44.5 million to 27,459 students in the state grant, scholarship, and loan forgiveness programs.



	Dollars	Students
MO College Guarantee Plus	34,000	15
Marguerite Ross Barnett	443,000	326
Advantage Missouri	1,300,000	606
College Guarantee	10,000,000	4,477
Bright Flight	15,500,000	8,238
Charles Gallagher	17,300,000	13,797

- Facilitated disbursement of over $264.5 million in over 154,000 disbursements in the FFEL (Federal Family Education Loan) program through ATOM (Automated Transfer of Money).

- Completed over 900 improvements to current internal systems that process the state grant, scholarship, and loan forgiveness programs, as well as the Federal Family Education Loan (FFEL) program to benefit the agency staff and ultimately the customer with more efficient systems.

- Provided data in response to requests for various projects intended to identify and improve service to the citizen:
  - Provided data for research for state senators on high school graduates from their respective districts that completed FAFSA forms.
  - Supported Lumina research project by supplying six years worth of FAFSA data.
  - Supported several requests from high schools regarding students' Bright Flight eligibility.

- Created new look and feel for Missouri Learners' Network in order to facilitate the distance learning process for prospective students.

- Web projects were completed that improved customer satisfaction by enhancing student, school, and lender abilities to get information efficiently and effectively. The following web projects also reduce time and effort of agency staff:
  - TRIO forms made available for schools to submit TRIO students for scholarship monies.
  - Registration forms made available for proprietary recertification workshops.
  - Registration forms made available for MOSTARS workshops.
  - Placed new statistical summary charts online.
  - Archived MOSTARS online newsletters.
  - High school statistical information made available online.
  - Missouri Assessment Consortium pages made available from our web site.

- Internal improvements and support for Department of Higher Education staff to facilitate their ability to provide services to the citizen as efficiently as technology will allow:
  - Improved request center for tracking computer-related problems and requests.
  - Completed 330 help desk requests that were recorded in tracking system.
  - Installed, configured and upgraded 14 new servers, 1 LTO tape library, 2 fiber storage units, and 2 complete server racks for the integration project.
  - Implemented new security measures that make it very difficult for the system to be compromised.
  - Installed 27 new PCs and 3 new printers.

- Continued training IT staff in new technologies to benefit the agency and ultimately the customer with better IT systems.

Planned Projects

- Impacting department customers:
  - Finish integration and web-enablement of the state grant, scholarship, and loan forgiveness systems; on target for 2004-2005 academic year implementation.
  - Continued development of new web site to implement dynamic content.

- Impacting internal staff:
  - Implementation of an intranet.
  - Implementation of an enterprise anti-virus solution with automatic updates.
  - Upgrade imaging hardware and software for improved performance and continued vendor support.
  - Upgrade request center to new java-based system to track computer-related problems and requests more efficiently.
  - Implement Office XP on all PCs.
  - Establish an internal IT training program.

Accumulated Demand

Several projects that were planned for this year did not get completed due to other priorities and are planned again for next year. These include:

- Live online assistance for students and other clients via our web site.
- Online PLUS loan applications and instant credit checks to verify eligibility. This is a costly item that may be put in place in the future, but not at the present time.
- Consolidated database information for program inventory.

Entities Impacted

- *Advisory committees* – (MOSTARS Advisory Board, MOSTARS Administrative Advisory Committee, State Programs Integration Workgroup, IT Advisory Board, IT Security Committee)
- *Department employees* – 85 (hardware/software/services purchase and support)
- *Designated middle and all secondary schools* – approximately 620 (GEAR UP, financial aid information)
- *Electronic communication recipients* – (CAO lists, Data Coordinators lists, Presidents lists, etc.; MOSTARS Subscription E-Distribution list: Guarantors – 12, High Schools – 190, Lending Institutions – 90, Other – 25, Postsecondary Institutions – 324)
- *Employers* – approximately 4500 (AWG, Advantage Missouri, Ross Barnett)
- *Financial aid applicants, recipients, and borrowers* – approximately 88,000
- *Legislature* – approximately 197 (request statistics regarding financial aid distribution in their district, IT also provides statistics to support budget requests)
- *Lenders* – approximately 75 (ATOM)
- *Other state agencies* – Labor (UI records), Revenue & Lottery (tax offset), Economic Development (Advantage Missouri), DESE (A+ information), OA (warrants, State Data Center)
- *Partners* – ACT, SAT, CPS (USDE)
- *Research projects* – Lumina, WICHE, UMC
- *Secondary markets* – 3 (ATOM)
- *Vendors* – IT contracts: prime vendor, IT consulting, WSCA; MOSTARS Contracts: Banking Services, Collection Services, AWG, Guarantor Servicing, Student Loan Reporting
- *Vocational/technical schools, colleges and universities* – approximately 300
- *Web site visitors* – approximately 200,000 unique visitors

General Department Profile (2002)

Department Name		
Department of Higher Education		
Street Address	City	Zip
3515 Amazonas Drive	*Jefferson City*	*65109*
Main Phone Number	Main Fax Number	Website URL
573-751-2361	*573-751-6635*	www.cbhe.state.mo.us
Department Director		
Quentin Wilson – Commissioner of Higher Education		
Number of FTE (entire department)	Approximate number of citizens served	
96.23	*500,000*	
Agency Mission (brief statement)		
The Missouri Department of Higher Education's mission is to foster a thriving system of quality higher education.		

Department CIO and IT Division Profile (2002)

Department Name		
Department of Higher Education		
Department CIO Name		
Gina Hodge		
Street Address	City	Zip
3515 Amazonas Drive	*Jefferson City*	*65109*

CIO Phone Number	CIO Fax Number	E-Mail Address
573-526-1583	*573-751-6635*	Gina.Hodge@mocbhe.gov

CIO Membership in Professional Associations – Leadership Role Involvement (i.e., NASCIO – serve on architecture standards committee)	
N/A	
IT Division Name	Website URL
Information Technology	www.cbhe.state.mo.us

Number IT FTE (located in central office)	Number IT FTE (located in field)
12 currently filled	*0*
Total $$ value of FY03 IT requests submitted to OA Budget and Planning	Total $$ value of FY03 IT requests funded
$0	*$0*

Security Officer Name	Phone No.	E-mail
Ted Suess	*573-522-1910*	Ted.Suess@mocbhe.gov
Privacy Officer Name	Phone No.	E-mail
N/A		
ITAB Alternate Name	Phone No.	E-mail
RJ Lodge	*573-522-4638*	RJ.Lodge@mocbhe.gov
SDC Steering Committee Rep Name	Phone No.	E-mail
N/A		

Department Technology Profile (2002)	
Department Name	
Department of Higher Education	
Main Processors (IBM 390 with MVS, UNIX AIX, UNIX Sun, etc.)	
Mainframe	*N/A*
PC Servers	*IBM Xseries with Windows 2000; Compaq with NetWare 5.1; Compaq with Windows NT*
Mid-range	*AS/400 model 500 with OS/400; AS/400 model 170 with OS/400*
Networked	*N/A*
Desktop (Windows XP, 3270, Linux, etc.)	
PC	*Windows 2000, Windows 98*
Dumb terminal	*N/A*
Network Protocols (TCP/IP, SNA, IPX, etc.)	
TCP/IP, SNA	
Internet Connections (DSL, Cable, Dialup, etc.)	
MAN connection	
Internet Service Provider (MORENET, AOL, etc.)	
MOREnet	
Security Provisions (packages, anti-virus, filters)	
Network	*Symantec/Norton Anti-Virus*
Desktop	*Symantec/Norton Anti-Virus*
Internet	*OA Firewall*
Help Desk Packages (Magic, GWI)	
N/A	
Database Management Systems (DB2, Oracle, SQL, etc.)	
DB2, SQL for imaging	
Development Tools (COBOL, CICS, Advantage:Gen, Websphere, .NET, etc.)	
Websphere, Java, COBOL	
E-Mail Packages (Exchange, Lotus Notes, etc.)	
Exchange	
Encryption Packages (SSL, PGP, etc.)	
SSL	

Version Control Packages (Source Safe, Panvalet, InterSource, etc.)
N/A
Telecommunications (T1, Frame Relay, etc.)
Fractional T1
GIS (ArcView, MapInfo)
N/A

Missouri State Highway Patrol

Accomplishments

MOBILE COMPUTING DEVICES (MCD)/WIRELESS PROJECT

This program provides Patrol personnel across Missouri with ready access to necessary criminal justice information in a timely manner. The project funding was made available through Federal earmarks. During the year 2002, utilizing Federal Funding, the Patrol acquired another 434 MCD devices for deployment in late 2002, and 2003.

The Patrol operates a voice radio communication system that has exceeded its saturation level for the amount of voice traffic required to support enforcement activities in the field. Officer safety is compromised in that officers may encounter dangerous individuals or circumstances without the benefit of information that could make a difference in their actions. Warrant entries are not being "hit" as the inquiry can't be made.

This deployment of the technology has shown improvement in officer productivity by providing officers with direct, timely access to important information. Improvement of officer safety was the projects' major goal. Another goal was reduction in radio voice communication. The deployment program has reduced the saturation level and permitted access for critical communications. This program also involved the development of an application to run on the mobile devices allowing officers to access MULES, National Crime Information Center (NCIC), Department Of Revenue (DOR) as well as perform car to Computer Assisted Dispatching (CAD), and/or car to car messaging and silent dispatch to CAD without use of radio voice communications.

UPGRADE 3270 DEVICES WITH PCs

The ISD implemented and completed a project to replace every 3270 (Green Screen) device within the organization. This involved surplus PC devices from the Missouri Department of Transportation and some new equipment. As of the close of 2002 every device in the Patrol organization is a PC with at least Windows 98 (a Traffic Management System requirement) on the desktop.

CONVERT BTAM TO TCP/IP

This project is to convert the four old technology Basic Telecommunication Access Method protocol applications on MULES to the newer technology Transmission Control Protocol/ Internet Protocol. The four interfaces are involved the FBI's National Crime Information Center (completed 2001), National Law Enforcement Telecommunications System, St. Louis Region's REJIS and Kansas City's ALERT. The project includes rewriting all the BTAM legacy interface code currently existing on MULES/2. The new code will be CICS command level code that will reside on MULES/3. The project is a joint effort involving the development and network personnel at NCIC, NLETS, REJIS and ALERT.

- **BTAM to TCP/IP Conversion – Phase II ALERT/REJIS**
  This project's benefit to the citizens of the State of Missouri was linking the criminal justice networks of the two metropolitan areas with a supported medium to the state's central criminal justice repository and national criminal justice databases. This project, completed in calendar 2002, moved the Patrol's primary communications infrastructure link with the local criminal justice agencies in the Kansas City and St. Louis areas of the state. The movement, from the older, no longer supported, Basic Telecommunications Access Method (BTAM) to the supported, newer, and more robust Virtual Telecommunications Access Method (VTAM), allowed the Patrol to implement the communications link with Telecommunications Control Protocol/Internet Protocol. This phase, of the total movement from BTAM to VTAM, allowed the Patrol and two of the major metropolitan areas, Kansas City (with their ALERT system) and St. Louis (with their REJIS system) to communicate using TCP/IP, which is also a supported communications protocol.

- ***BTAM to TCP/IP Conversion – Phase III NLETS***
  This project, completed in calendar 2002, moved the Patrol's primary communications infrastructure from the older, no longer supported Basic Telecommunications Access Method (BTAM) to the newer, supported, more robust Telecommunications Control Protocol/Internet Protocol. This phase will allow the Patrol and the National Law Enforcement Telecommunications System (NLETS) to communicate using TCP/IP. NLETS, which is located in Phoenix, AZ, allows inter-state communication capability between the various law enforcement agencies across the nation.

Criminal History Records System

The Criminal History Records System has undergone a major conversion that has completed in 2002. The Criminal Records and Identification Division of the Missouri State Highway Patrol (MSHP) is the Division charged with the responsibility of identification of individuals and maintenance of criminal records. The Criminal History Records System (CHRS) is a system comprised of a series of manual and automated techniques intended to accurately collect, compile, and provide criminal history record information for the purpose of criminal justice administration on the arrest, prosecutor, courts, and custody level as well as criminal justice and public employment. Missouri's

Criminal History Records System is a comprehensive integrated data system that has been developed to respond to criminal justice agencies increasing demands for clear, concise, accurate information. This system contains the following features:

- An automated arrest module that provides for the timely processing of formal action associated with an arrest incident.
- A caution indicator notification module capable of maintaining pertinent information about offenders involved in crimes of violence, weapons offenses and police officer assaults.
- An automated disposition module that provides for the timely processing of the primary judicial disposition as reported by the state's courts.
- A dissemination/logging module providing a central file containing all dissemination information.
- A notification of record change reporting module capable of producing documents suitable for notifying qualifying agencies that a record disseminated to them in the past 13 months has changed.
- An automated rap sheet module capable of producing a rap sheet suitable for dissemination.
- A statistical reporting module capable of producing reports in the areas of crime, dissemination, and system usage statistics.

MULES3/NCIC Model – Stolen Plates

This phase of the conversion of MULES 2 legacy applications to newer more robust technology was required by regulations mandated by the FBI's NCIC 2000 system and was completed in calendar 2002. The project includes the planning, design, documentation, development, data conversion, reporting, testing, training, and implementation of Stolen Plates using the NCIC 2000 Advantage Gen model. The completion of the conversion provides the citizens of the State of Missouri with Public Safety and Criminal Justice information, should they have their license plates stolen or need to know if a license has been stolen anywhere in the country. The conversion of this phase provides law enforcement agencies throughout the state with the ability to enter, modify, query, clear, cancel or locate stolen vehicle plates into MULES and the NCIC using the new technology.

MULES/3 Stolen Parts

Initiation of the project was to continue the development of the Stolen Parts component of MULES/3. The project includes the planning, design, documentation, development, data conversion, reporting, testing, training, and implementation of Stolen Parts using the NCIC 2000 Advantage Gen model. This system provides law enforcement agencies throughout the state with the ability to enter, modify, query, clear, cancel or locate stolen vehicle parts into MULES and the NCIC using the new technology.

Virtual Private Network (VPN) Access

First a definition of a Virtual Private Network (VPN):
A VPN (virtual private network) is a way to use a public telecommunication infrastructure, such as the Internet, to provide remote offices or individual users with

secure access to their organization's network. A virtual private network can be contrasted with an expensive system of owned or leased lines that can only be used by one organization. The goal of a VPN is to provide the organization with the same capabilities, but at a much lower cost.

A VPN works by using the shared public infrastructure while maintaining privacy through security procedures and tunneling protocols such as the Layer Two Tunneling Protocol (L2TP) In effect, the protocols, by encrypting data at the sending end and decrypting it at the receiving end, send the data through a "tunnel" that cannot be "entered" by data that is not properly encrypted. An additional level of security involves encrypting not only the data, but also the originating and receiving network addresses.

This project, completed in calendar 2002 provided access to the Patrol's network for agencies that do not have direct connection to the Patrol and it's resources. This technology was used in lieu of more expensive and less secure dial up using an Internet Service Provider (ISP).

Uniform Crime Reporting Program Design – Phase II

UCR is an automated web-based system for the collection of summary based crime offense and arrest data as reported to Criminal Records and Identification Division by all Missouri Law Enforcement agencies. Phase I (as stated in the 2001 accomplishments) was the actual development of the UCR web site, data interfaces and repository for FBI required UCR data. At the completion of phase II added an Internet browser based report function to the Missouri UCR Repository that provides dynamic statistical analyses of crime data reported by Missouri law enforcement agencies. With this functionality, users can select a specific report (i.e., Part I crime offenses, Part I and Part II arrests, homicides, arsons, domestic violence incidents, and property loss due to crime) and modify its timeframe (i.e., annual, year to date, monthly), geographic area (i.e., statewide, county, local, college), and format (i.e., PDF, HTML, Excel) to run in real time against the UCR Repository. Users also can drill down on data within reports to conduct additional analyses such as offense type, weapon type, victim / offender demographic characteristic, or victim / offender relationships.

Academy Notes Enterprise Continuing Education

In the year 2002, development of the Academy Training Tracking System was completed to assist the Training Division in retaining and maintaining academy student data in a more accurate and timely fashion.

Under the Academy Student Records system, which has been around for many years, it requires much manual effort on the part of the Academy staff members. The legacy system was designed to operate in both a batch and an on-line mode which means the appropriated data was entered, modified, and viewed by the user via a terminal and data are also disclosed using several hard-copy reports. The old system could lead to potential data error as updates of all occurrences of the data may be overlooked by or not known to the individual performing the manual updates. These files must be retrieved, reviewed and returned to the file cabinets that are cumbersome and obtrusive.

The Academy Training Tracking System provides for the entry of student and class related documents needed to fulfill the division's responsibilities. Once entered, standard system views can be accessed from the navigators along with additional batch reporting that will be initiated by the user. No control cards will be needed. With the new system, upon receiving an application for training, the Training Division enters some basic information to identify the student. For a person applying for Training who has been previously trained by the Training Division, his or her identification information and department information will still be on file and may be easily located by search capabilities.

The new systems provides:

- Student enrollment, student grade reporting, agency ORI information, and transcripts.
- A record of all money received from and returned to law enforcement departments for training is kept by the system.
- Standard codes such as sex, race, physical characteristics, etc., to provide uniformity with all forms located in each database.
- Comprehensive help messages on all fields supporting the data entry and maintenance process.
- Personnel features are linked to the academy student master profile as response documents.
- Textural search capabilities.

National Sex Offender Registration (NSOR) Interface

This project was to develop a National Sexual Offender Registry to be used with the MULES/3 NCIC 2000 model and interface with the FBI. This system replaced the Patrol's legacy CJ24 state system. It also interfaces with a web based front end, which is currently being developed and is responsible for capturing all the sex offender registry information.

The National Sex Offender Registry is federally mandated as part of the Pam Lychner Sexual Offender Tracking and Identification Act. The MULES system has a direct connection to the NCIC 2000 system and therefore directed by the mandate. When sex offender files are updated, from across the state, the files are updated at the Patrol and sent to NCIC 2000.

The State of Missouri registry needed to be rewritten to include all fields in the NCIC 2000 Sex Offender Registry, to allow inquiries for offender lists at the city, as well as county level of residence, establish a risk factor of each sexual offender, establish address verification tracking and compliance, and to provide a more user-friendly computer program environment for the end-users. Under the old system the local agencies registering the sexual offenders lacked an automated means of submitting registration information to the Patrol. Information was submitted on manual forms through the mail, thus information was not transmitted in real time and the information submitted might not contain all the necessary information. For instance, a person may register with the Chief

Law Enforcement Officer (CLEO) in a location but the registration form submitted to the registry might not include enough information to enter the offender on the national list.

In 2002 the Patrol finished building the sex offender application using the NCIC 2000 model to establish a Missouri Sex Offender System to comply with the interface with the National Sex Offender Registry. The system has a web based front end that communicates through an electronic interface to the mainframe MULES application that in turn then communicates with the NCIC.

State-wide Traffic Accident Reporting System and Traffic Management System (STARS / TMS) Integration

This project re-engineered the Statewide Traffic Accident Records System (STARS). The plan involved using Missouri Department of Transportation's (MoDOT) Transportation Management System (TMS) to facilitate this re-engineering scheme. The project was to be completed to coincide with a revision to the STARS accident report form.

The STARS system is now a module of the MoDOT TMS system, with access and utilization by both organizations. This integration project has reduced the cost of redesign to both agencies, and provides the citizens of the State of Missouri with a common system which eliminates existing interfaces, improves data integrity and facilitates a common basis for reporting of accident information. The integrated system was implemented in early 2002.

Help Desk Level 1 Training

The Level One Help Desk project was initiated to provide a timelier and more efficient response team to handle the first level of problem reporting for information technology related problems. Surveys were sent to all of the Patrol's troops in order to determine the types of problems being encountered. The Statistical Analysis Center analyzed the results and a curriculum was development to train the level one staff. Each troop selected staff to serve as level one personnel within their troop. ISD developed the training agenda, training booklets and manuals, and conducted the training. Over 50 field level-one help desk staff has been trained. Problems that occur in the field at the troop or zone level are reported to a level one staff member that is on duty. All level one staff received training to use the Allen System Group's IMPACT Helpdesk application and now input their own tickets from the field. Level one staff that cannot resolve a particular problem may forward the problem to level two staff in ISD electronically via the ASG Impact software.

NCIC Requirements for Security Methods and Procedures

In information technology today, the technological advances that impact security as well as the threats and risks to security are occurring at such a fast pace that to be effective, a security plan must be viewed as a continuously evolving plan. Policies, procedures, standards and appropriate resources must be in place to provide for the meeting of current security requirements. This project encompassed the implementation of research and review of all security-related policies and procedures performed by ISD in calendar 2001.

The development and implementation of the new policies and procedures was completed by September 30, 2002, to be in compliance with NCIC.

A number of events precipitated the establishment of this project for a complete review of the Patrol's roles and responsibilities relating to security. These events included the creation of an Information Security Officer (ISO) by the FBI along with a number of responsibilities, new Criminal Justice Information Systems (CJIS) Security Policy released July 2001, new requirements for connection to the Regional Information Sharing Systems (RISS), and data center consolidation. The ultimate goal of the project was to develop a complete, comprehensive, coordinated set of security policies, standards, and procedures that are compliant with all state and federal internal and external requirements. In addition, the project was to determine and recommend staffing needs required to implement and support the overall security program.

A project team consisting of a number of Patrol staff was formed. The project team reviewed the ISO responsibilities, CJIS Security Policy, MULES Policies and Standards manual, Patrol general orders relating to security and the RISS agency agreement. The review of these documents focused on identifying external security requirements, validating that MULES Policies and Procedures and Patrol General Orders were consistent with Federal requirements, and identifying other security requirements for which policies and procedures were required. A research document was prepared presenting the results of the research, along with recommendations for the development and implementation of a coordinated, comprehensive, and fully compliant information technology (IT) security program.

Upgrade Commercial Vehicle Enforcement Inspections

This project upgraded CVE inspections from a Windows NT Server to a new release of Safetynet 2002 on a Windows 2000 Server. It also migrated the CVE Accidents from the HP20 Safetynet mainframe to the new Safetynet 2000 server and built the connection to receive the new CVE accident information from the Traffic Management System at the Missouri Department of Transportation. PC hardware and software upgrades where also performed at the scale and Van locations to handle the new fields in Aspen, the inspection collection software, which populates a collection server which now updates the SAFER bulletin board for the Federal Government and the new Safetynet 2000 server.

Public Private Network Project

This project required the repositioning of incoming circuits into our core routers. All Patrol entities are deemed private in this scenario and all Patrol circuits were directed to a 7204 router on the Private side of the network. All other incoming network connections from the Consolidated Network are terminated on dual 7507 routers on our Public side of the network. The Public and Private sides are connected by two 2924 switches. This will position the Patrol for security issues that may evolve from future NCIC mandates.

Amber Alert Notification System

This system was developed through a coordinated effort involving several state agencies and public media based on a request for a statewide voluntary AMBER Alert program to alert the public via broadcast media when a child is abducted. Under the plan, area radio and television stations interrupt programming to broadcast information about the abducted child using the Emergency Alert System (EAS), typically used for alerting the public to severe weather emergencies. The Patrol created a name and address book in Lotus Notes for use in notification for the system. A number of groups and subgroups were defined and the network connections established to allow for the notifications to be made.

Fixed Asset / Statewide Advantage for Missouri (SAM II) Integration

This project was initiated to complete the Interface and Data Conversion from an unsupported application to SAM II in order to meet the Fixed Asset Requirements of SAM II. The SAM II team identified Agency requirements for this interface.

Document Imaging

A new document imaging archive system was installed to replace the antiquated Visual Info system an OS/2 based system, which was no longer supported. Approximately 2.3 million documents relating to Criminal History Information were moved to a midrange-computing environment. The new system provides for faster entry and retrieval of documents.

Missouri State Police Intelligence Network Web-Enabled Application (MOSPIN)

This project was initiated to web-enable the Patrol's MoSPIN application, and make it available to additional agencies as a browse-based application accessible via the Mid-States Organized Crime Information Center's (MOCIC) RISSNET Network. Through this process, access has been expanded to include MSHP, Gaming Commission, Missouri Task Force Operations, and other agencies with access to MOCIC's RISSNET. This project encompassed web-enabling the existing application, coding of some high priority enhancements, and migration to the RISSNET Accessible network.

DOR/MVI Internet Renewal Program

The Department of Revenue is implementing an Internet Renewal Program, House Bill 1797 mandated access to the Patrol's Motor Vehicle Inspection database to verify Vehicle Inspection data. The Patrol will use IBM's Messaging and Queuing middleware product (MQ Series) to receive the Station Number, Inspection Date, Sticker Number and the Control Number, validate against the Patrol's Motor Vehicle Inspection database and pass back valid/invalid messages to the Internet Portal application.

Statewide Advantage for Missouri II Position Numbers

The SAM II HR/Payroll system has assigned a "position number" to every FTE the Patrol utilizes. The position number information is assigned on the PSMT screen in SAM II and is directly related to the organization number and job title for each FTE. Although each

employee is assigned a job title with a corresponding position number, the position number is not directly tied to the employee.

The position number needed to be added to the Patrol's Data Warehouse and then added to various reports produced from the legacy system. At completion, a report displaying both vacant and non-vacant position's is no longer needed now due to being able to get that information from a MOBIUS report per Human Resources. A separate Customer Service Request will be submitted regarding changes to the legacy reports and the reports needing the position number information will be indicated.

DARE / DRE Web-Site Enhancements

This project was initiated to enhance the current DARE Web-site based upon updated requirements of Patrol's Training Division and Dare America, and includes a Chaplain's Program site. This project was contracted to outside vendors and funded by DARE America.

Missouri Criminal Justice and Highway Safety Support (Completed Recurring Projects)

Research and data analysis was provided to state and local traffic safety and criminal justice authorities to identify the scope, magnitude, and severity of crime and traffic crash problems in Missouri. Research and analyses were conducted to identify the nature and extent of Missouri's illicit drug and crime problems and to evaluate Narcotics Control Assistance Program (NCAP) funded criminal justice programs endeavored to address these problems. Publications developed to this purpose include the Quarterly *Multi-jurisdictional Drug Task Force Report*, *Crime Laboratory Report*, *DARE Report*, and the *Public Opinion Survey Final Report*. Also, research and analyses were conducted to identify specific types of traffic safety problems and evaluate policies, programs, or countermeasures considered for implementation. Publications developed include, but not limited to, the *Traffic Safety Compendium*, *Holiday Crashes Report*, and the *Emergency Service Vehicle Crashes Report*. Assistance was also provided for the development of the *Missouri Highway Safety Plan*, *Police Traffic Services Reports*, and *Traffic Report of Accidents for Countermeasure Establishment* (TRACE) reports.

Planned Projects

CHRS Post Implementation Enhancements

The project was initiated to complete post implementation tasks for the Criminal History Record System (CJ25). Tasks include but are not necessarily limited to:

- Complete System Test for Interfaces and "Hold" Files
- Address System "Changes" Identified During the Initial Project
- Code Additional Priority 2, 3, and 4 FOCUS and WebFOCUS Reports
- Conduct a Transition Code Walk-Through with the entire project team
- Address Priority System "Bugs" encountered during Post-Implementation period

School Bus Inspection System

A project to rewrite the HP07 School Bus Inspection System, which is currently using the AS400 for data entry for inspections, re-inspections, district addresses, inspection scheduling, and maintaining district code files. This information is Remote Job Entered to a tape. Several reports are ran after downloads and the school bus letters are generated using Job Control Language that accesses the tape and generates several focus programs on the mainframe. Lotus Notes was used for the rewrite of this system allowing data to be kept more organized in a central location and provide a more user-friendly environment. Changes were made without transferring data from one platform to the other.

Uniform Crime Reporting (UCR) Post Implementation

Additional on-line reports will be developed that describe homicides and assaults on law enforcement officers, law enforcement employment levels, law enforcement compliance to UCR reporting requirements, and distribution of seized clandestine laboratories. In addition, statistical analyses of UCR data will be provided in a new annual publication entitled *Crime in Missouri*. This new publication follows the design of *Crime in the U.S.* by the FBI and replaces the *Missouri Crime and Arrest Digest* and *Missouri Crime Summary* previously published by the MSHP.

Missouri Incident Based Reporting System

A multi-year MIBRS conceptual strategy provides for the implementation of an automated web-based reporting system to collect detailed information relating to when and where crimes occurred, offender and victim demographic characteristics, weapon and drug involvement, property loss, and crime motivation. These data, once collected, will reside in a state maintained repository and be accessible by local, regional, and state criminal justice agencies in addition to Missouri citizens via Internet access. These data will impact decisions related to crime prevention, crime intervention and law enforcement.

A collaborative web based application was designed, developed, and implemented for use by the Missouri Crime Incident Based Reporting System (MIBRS) project development team consisting of staff representatives from various Missouri law enforcement agencies. The collaborative web based application provides a dedicated site that MIBRS project team members can access to communicate and exchange information regarding the project. The site allows display of group calendars, entry and modification of team member activities, posting of meeting notes, synchronous chatting, email list servers, and instant messaging. In addition, the collaborative web based application provides updates to other law enforcement agencies and interested entities on MIBRS progress and implementation plans.

The conceptual design the MIBRS central repository and its content and data model development strategy is currently being designed through a series of Joint Application Development (JAD) sessions comprised of members of the MIBRS committee as well as site visits to existing programs in other states. Through these efforts, repository requirements will be documented and include detail data specifications, recommendations

for data model, reporting techniques, architecture, infrastructure, process changes, and systems integration strategies.

e-TP (Electronic Transaction Processing)

Patrol Website Reconstruction: This project was initiated to revise the Patrol Website. This project encompasses a total revamping of the Patrol's website based upon input from committees tasked with looking into this design effort. Among the applications to be implemented is the Patrol Web hosting of Applicant information. In this application the Patrol has plans to design, build, implement and support a Web based applicant system that will allow interested parties from across the state to complete and submit application data using the Internet. This project is currently in the very early stages of product training and development. The e-TP project also addresses architecture, security, hardware redundancy, etc. necessary to support Intranet and Internet transaction-based application development into the future. The Patrol will send a team to the IBM Design Center to design, develop and test the application using IBM's WebSphere products. WebSphere is also the development tool being used in the design of the State of Missouri e-government Website. The Patrol's application will conform to e-government standards.

Port ADVANTAGE-Gen Application from MVS to AIX

Pilot Program to Port is an Advantage:Gen Application from an MVS mainframe environment housed at the State Data Center (SDC) to an AIX environment housed at the MSHP. The project was initiated to pilot the migration of a Mainframe/MVS based Advantage:Gen application to the RS6000/AIX platform. The pilot includes defining and acquisition of any necessary software or tools (such as AIX Implementation Toolset), as well as any tasks necessary to successfully migrate the "pilot applications" to the new platform. For this project, the "one pilot application" will be the DC03 Application Systems Catalog. Computer Associates has been consulted regarding temporary (free) access of any necessary tools to complete this pilot project. The results of this project will be utilized to plan for the potential strategic move of selected Advantage:Gen applications from the SDC to the Patrol AIX platform. This move is to assess the cost avoidance possibilities for processing Patrol applications on AIX vs. MVS.

Encryption – MULES Network/MAN

In calendar 2002 the Missouri State Highway Patrol requested and received funding for hardware and software to "encrypt" the data coming from and sent to other criminal justices agencies on public telephony networks. The encryption required a piece of hardware and software at both ends of the 406 data circuits located throughout the state. The requirement was due to Patrol utilizing the FBI's National Crime Information Center for entry and inquiry into national criminal history files and various other national criminal justice-related files (i.e., Convicted Sexual Offender Registry, Convicted Persons on Supervised Release, Historical Protection Order files, etc.). In order for the Patrol to be able to have access and entry to the national files they are required follow specific rules, guidelines and policies or face sanctions that could include exemption from use.

In the spring of 2000 the Criminal Justice Information System's Advisory Policy Board informed members "All intelligence information or criminal history record information passing through a public network segment that is not dedicated to criminal justice purposes shall be protected with encryption while in that segment." The Board indicated further that criminal history networks must be encrypted by September 2002. This directive was again repeated in March 2001. In 2002 the Patrol requested an extension of the mandate to procure funding for equipment, software and installation related to the 406 criminal justice agencies connected to the MULES network that rely upon national files in order to perform their duties. This funding request was approved in the last fiscal year. The funding allowed the Patrol to acquire the necessary hardware and software to comply with the NCIC directive and continue to provide access to national criminal justice related data. Funding allowed the Patrol to purchase of 406 encryption devices and software for local law enforcement agencies and two central site servers and software. The Patrol started the implementation phase in calendar 2002 and completed installation of approximately 50 percent of the router installations. Work will continue thru mid-2003.

The benefits are the citizens of the state of Missouri will be assured their criminal justice agencies are receiving timely information from not only the state, but nationwide sources relating to criminal histories, sexual offenders and orders of protection. This initiative also follows the Department of Public Safety's Strategic Plan Outcomes 1.1.1.1, 1.1.1.2, 2.1.1.1, 2.1.1.2, 5.1.1.2 specifically addressing reduced incidence of crimes against persons and property. The use of criminal related data will provide the criminal justice personnel with complete and timely criminal information. In addition, the utilization of national criminal data files will help state agencies develop partnerships and collaborations to help prevent violent and property crime, both in Missouri and across the nation. Data sent and received will allow the MSHP to actively participate in the Governor's Safe Missourians Show-Me Results Initiative pertaining to violent and property crime. Aggressive criminal interdiction programs will be benefited by access to national criminal justice files statewide to deter crime.

RS6000 Reconfiguration for CAD

The number of Mobile Computing Device's (MCD's) in operation has increased the demand of usage on the Computer Aided Dispatch (CAD) system and the message switch. The officers with MCD's have availability to access CAD, which allows them to do silent dispatch and eliminate radio traffic with dispatchers. They also access the MULES and NCIC hot file systems via the message switch. The CAD system will be moved to faster RS6000 nodes to improve performance. The new nodes will also be connected to external storage devices increasing the storage capabilities for archived calls for service.

Automated Fingerprint Identification System / Computerized Criminal History Integration

The Gateway Services Provider III (GSP III) will interface MSHP's Automated Fingerprint Identification System (AFIS) and Criminal History Reporting System (CHRS); provide for electronic receipt of fingerprint images, demographics and criminal history information; and provide for submission of electronic records to the FBI's IAFIS. The GSP III provides a number of advantages including facilitating more streamlined operations by eliminating redundant data entry of demographic and fingerprint information thus allowing better utilization of personnel.

With the installation of livescan and card scan devices throughout the state, demographic data, criminal history data and fingerprint images can be captured at the time of arrest and forwarded directly to the interfaced AFIS and CHRS systems via the GSP III. Operator intervention will no longer be required prior to the launch of a technical search of the AFIS database. Following completion of the AFIS technical search, the CHRS database will automatically be updated with the new arrest information. Since all the necessary data is captured at the time of the arrest in the required format and forwarded electronically to the Patrol, the local agency is not required to mail a fingerprint record, and the Patrol is not required to enter the arrest information and scan fingerprint images. This decreased processing time also means local and state law enforcement agencies will have access to criminal history information sooner. The GSP III also allows MSHP to forward the same electronic fingerprint record to the FBI's IAFIS. Manual intervention will no longer be necessary; following AFIS/CHRS processing, fingerprint records will automatically be sent to the FBI updating the IAFIS database. Again, this decreased processing time means faster access nationwide to new criminal history information.

Troop Local Area Network Upgrades

A server is located at each of the Patrol's nine troop locations and used to store shared and home directories. These servers were approximately 6 years old. New servers were installed at three of the troops increasing the storage capacity and performance. Several applications were also moved to the troop servers to improve performance and response times. The remaining troop upgrades are scheduled over the next few months.

Move Logscan Processing to RS6000

The Patrol "logs" or records each and every transaction coming into or out of the MULES system. This project is to move log scan processing from the State Data Center's MVS mainframe to the RS/6000 located at the MSHP. This is required for both security and privacy reasons. Log data will be transferred via IBM's Message and Queuing (MQ). Searches need to be developed on the RS/6000 and reports created to satisfy Security and Quality Control requirements.

Mainframe Resource Management

The Patrol operates the majority of their application systems at the Office of Administration's State Data Center, which uses a usage sensitive cost recovery system. With state finances as they are, this project was initiated to identify and monitor all SDC mainframe chargeable resources such as disk space, tape storage, CICS transactions, CPU

utilization, and software usage. New disk and tape management methods will be developed. Procedures to monitor and report storage capacities will be developed. Data will be collected to show trends to help in performance, budgeting and capacity planning.

DWI Tracking System & Repository

Phase I of this project encompasses design, development, and implementation of a DWI Tracking System and Data Repository. Three options for DWI incident information submissions will be developed and include an Internet Browser based forms application, extract file interface coding and data transfer directly from law enforcement agencies' resource management systems. The DWI Tracking System also will provide interfaces for information processing from law enforcement agencies, prosecuting attorneys, circuit and municipal courts, alcohol treatment programs, DOR, Patrol Traffic Accident System, Uniform Complain and Summons audit system.

AS/400 Conversion to Microsoft Office

This project involves the conversion of all AS/400 OfficeVision documents to Microsoft Word. It also includes the conversion of AS/400 email and calendar to Lotus Notes email and calendar. Support for OfficeVision is being dropped therefore necessitating a conversion to a different office product. The Patrol will benefit by using the highly accepted Microsoft Office and Lotus Notes products that are more readily accepted as the business standard. These products allow the Patrol to communicate throughout the business world in a more expedient and efficient manner.

Upgrade Weather Wire

The National Weather Service application operates in an OS2 environment interfaced with the MULES system. This system allows law enforcement agencies to access the weather conditions in a real time on line environment. OS/2 is no longer a supported operating system and a conversion to a Windows platform was needed. The software operating in this environment in addition to no longer being supported has experienced operational problems. This project involves the conversion of the Weather Wire PC applications to Windows.

CI20: Patrol Investigative System

This system is used for capturing arrests, narcotics, forfeitures, seizures and polygraph data. This database will produce the Arrest/Incident/Investigation report, the Polygraph report and the Buy/Bust report to be supplied to the prosecutor. This database will also search reports including narratives for commonalities as requested. The system is being developed to reduce redundancy of data entry and to track all information related to an arrest, investigation or incident all in one place.

Disaster Recovery Plan

This project is to build the base for a Disaster Recovery Plan for ISD operational functions for continued support of the Patrol in times of disasters. Assigned duties, time frames, costs, personnel required, etc. will be identified and the Disaster Recovery Team will be operational if and when a disaster should strike the Patrol complex. The plan is being developed internally without the use of state funding for outside consulting. Items

being addressed are equipment, software, office area space, lack of availability to key personnel or all personnel, and general needs in the event of a disaster. The outcome will also provide the basis for developing a financial plan for the procurement of the resources necessary for the continued operation of the Patrol's IT infrastructure.

Statewide Advantage for Missouri (SAM II) Outstanding Tasks

This project was initiated to address the state's SAM II accounting system's related activities, which remain unresolved following Phase I and Phase II implementations of SAM II. Activities include but are not limited to: HP08 Time Accounting Interface, Base Financial Data Warehouse and Reporting Module, Human Resources/Payroll Priority 3 Reports, Inventory System Data Conversion & Interface, and a SAM II Documentation Database.

Criminal Lab Division Notes Enterprise

This project was initiated to conduct analysis for a Lotus Notes-based enterprise system to address the Patrol's Lab's data processing needs. This project addresses all automation processing requirements for the Lab. In addition, the new Crime Lab Information Management System will be integrated with a newly designed Notes-based Property Control Inventory System.

Application Data Warehouse Migration from State Data Center

This project was initiated to migrate the Uniform Crime Reporting (UCR) Data Repository / Data Warehouse files from an MVS/DB2 environment at the State Data Center, to an AIX/DB2 environment at the Patrol. The scope of this project encompasses the following:

- Database development on AIX
- Data Migration
- Master and Access File Description Transition
- Copy Job Migration
- FOCUS code Migration
- Testing in the New Environment
- Misc. Related Activities

Oneform Accident Form Design

This project develops an electronic accident form for the MSHP road officers. The electronic form designed using Amgraf's Oneform Forms Design package contains full editing functions as well as an accident drawing feature. Road officers will benefit by completing accident forms in the field on a mobile computing device in a timelier manner allowing them more road time and public visibility. Currently officers fill out a manual short form at the scene and later complete the form in a Patrol zone office.

Fixed Asset / Statewide Advantage for Missouri (SAM II) Integration

This project was initiated to complete the Interface and Data Conversion from an unsupported application to SAM II in order to meet the Fixed Asset Requirements of SAM II. The SAM II team identified Agency requirements for this interface.

STARS / TMS Post-Implementation Enhancements
The project to re-engineer the Statewide Traffic Accident Records System (STARS) was completed in 2002. That plan involved using Missouri Department of Transportation's (MoDOT) Transportation Management System (TMS) to facilitate this re-engineering scheme. The STARS system is now a module of the MoDOT TMS system, with access and utilization by both organizations. This project will address unresolved issues from the implementation of the system and develop new enhancements.

MSHP Forms Portal Project
The Patrol intends to develop forms using several different software products including Amgraf's OneForm software. Some forms are very complex in nature requiring more sophisticated development software, such as OneForm. The business requirements for these forms may include extensive edits and feeding backend databases. Other forms may be very simplistic in nature and may only require that they be filled out and printed. This project will address the assessment and development of a forms portal that will provide the control point for forms selection and processing. The portal will be the mechanism that allows the user to select any form, regardless of how the form was developed, complete it, and have it processed.

Internal Affairs Case Management System
This system was requested by the Patrol's Professional Standards Division to automate their internal affairs process. The system, being developed in Lotus Notes, will track all complaints issued by the Patrol's civilian or uniformed members. The system will also have the capability to produce a various number of reports.

Accumulated Demand

Criminal Justice Information System Interface to MULES
The Office of State Court Administrators has received grant funds administered by the Violence Against Women Office (VAWO) for $275,000. This grant is to be used to develop of electronic warrants from the CJIS Case Management system to MULES and then on to the National Crime Information Center's protection order file. This project will consist of developing the communications interface between CJIS and MULES and the development, modification, testing and implementation of the application that will be needed to automate the process.

CINCOM Transition Strategy
A project to be initiated which analyzes the Patrol's inventory of applications utilizing CINCOM products such as Mantis, SUPRA, etc., and developing a strategy for transition out of the CINCOM product line and into newer technologies supported by the State Data Center. This request does NOT address implementation of the strategy defined.

Network Diagnostics/Capacity Planning
Researching, demonstrating, purchasing and installation of network management software and hardware that will enable us to troubleshoot our network issues and monitor the performance. Service Level Agreement's with the members of the cooperative

network require us to provide reports to the member agencies as to the status of the network.

Network Redundancy

The Network Redundancy project consists of addressing as many single points of failure as possible. Dual power supplies and dual supervisors have been installed on all core routers. Dual switches have been placed between the public and private sides of the network. The new state network contract will have redundancy built in the form of redundant paths across the state in the event of circuit failure. To complete the project we will be installing a new core switch that will feature redundant power, redundant supervisors and supervisor memory.

Internet Activity Reports

Request a project be initiated to develop statistical reports depicting Internet activity. The following reports have been identified, with details provided on an attached IOC from the Patrol's Research and Development Division dated May 24, 1999: 1) Internet Exploration, 2) E-Mail Received, and 3) E-Mail Sent.
This CSR addresses the following tasks:

- Determine data volumes and logging requirements for the information requested on these reports.
- Where possible, develop each report by Division, by Commander, and by employee, to be produced on a monthly basis.
- Determine which reports and/or data is not feasible to be produced as requested. Document the data / reports and the reasons why it is not feasible or recommended to do so.

Supply Order and Requisition

This project will develop an application to address the supply order and requisition process. The current process includes management of Universal Asset Tracker's Inventory Manager and Personnel Tracker software, as well as an AS/400 database and associated Patrol form. Supply items, quantity, etc. is currently maintained in the Inventory Manager application. Any supplies that can be requisitioned by Patrol entities are "duplicated" in an AS/400 database. Patrol Troops and Divisions then requisition supplies by cutting & pasting information from the AS/400 database to the designated Patrol form. This begins a process of numerous paper flows.

Since the AS/400 solution represents a duplication of effort, is awkward to use, and is at risk since Office Vision is no longer supported, an alternate solution is desired. In addition, the UAT software is also "at risk", since the vendor is no longer in existence. The recommended solution is a Lotus Notes based application to replace the AS/400 files and address the requisition process flow. Ultimately, the UAT software functionality would be "consumed" as modules within the Notes application. Since a data conversion from Access to Notes is required, an initial phase of the project might be to schedule the conversion jobs, build the AS/400 replacement module, and maintain the UAT functionality until a later phase. Another consideration for the UAT module is to

consider this in the Patrol's overall Inventory Consolidation project. With this in mind, the two-phase approach to this request may be most desirable.

ADVANTAGE-Gen CE to CSE Migration

This project was initiated to investigate the feasibility of, and process for migrating away from the ADVANTAGE:Gen Central Encyclopedia (CE) currently being utilized on MVS at the State Data Center. Client / Server Encyclopedias (CSE) are available on platforms such as AIX and NT, that are now fully compatible with CE functionality. Moving to this platform will give MSHP full control of Model Management, Backup, and Administration capabilities on a local platform, and will eliminate related Data Center costs as well as relieving Data Center responsibilities associated with coordination of MSHP ADVANTAGE:Gen models.

CAD Reporting Module

This project was initiated to develop a customized reporting interface against the CAD archived files. MSHP currently only has access to "canned" CAD reports which do not always meet the requirements of Communications Division, as well as outside requests to the Keeper of Records for CAD information. This reporting interface would be a browser-based solution utilizing the WebFOCUS technology being deployed as a reporting interface throughout the organization.

Inventory System Consolidation

Request a project be initiated to analyze the multiple automated systems currently utilized by MSHP to track inventory or fixed assets, and develop a plan for consolidating these systems down to one or two applications if possible. The study should consider that the Universal Assess Tracking system is no longer vendor supported. The solution should accommodate the bar coding interface currently utilized with UAT if possible. The solution should also include parameters for necessary data conversions, and interface requirements of SAM II.

Officer Activity Data Warehouse Migration

HP56 Data Warehouse Migration from SDC project is to be initiated for migration of the Officer Activity Racial Profiling Data Repository / Data Warehouse files from an MVS/DB2 environment at the State Data Center, to an AIX/DB2 environment at the Patrol. The scope of this project encompasses the following:

- Database development on AIX
- Data Migration
- Master and Access File Description Transition
- Copy Job Migration
- FOCUS code Migration
- Testing in the New Environment
- Misc. Related Activities

Statewide Advantage for Missouri (SAM II) Data Warehouse Migration from SDC

Request has been made for a project to be initiated migrating the SAM II Data Warehouse files from an MVS/DB2 environment at the State Data Center, to an AIX/DB2 environment at the Patrol. The scope of this project encompasses the following:

- Database development on AIX
- Data Migration
- Master and Access File Description Transition
- Copy Job Migration
- FOCUS code Migration
- Testing in the New Environment
- Misc. Related Activities

ISD Standards Automation Tool – Post Implementation Modules

This requested project is to initiate the redesign of the ISD policy and standards manual to accommodate standards for new technologies and practices, as well as facilitate prompt updates and staff access to the standards.

Implementation of ADVANTAGE:Gen 6.0

Install, test, and implement ADVANTAGE:Gen 6.0. Test ADVANTAGE:Gen 6.0 with new version of DB2. Upgrade all PC's currently using ADVANTAGE:Gen 5.1. Consider impact to Model conversions, MVSIT, ROB Component, and availability for clients to run in Windows 2000 OS.

General Department Profile (2002)

Department Name
Missouri State Highway Patrol a Division of the Department of Public Safety

Street Address	City	Zip
1510 East Elm Street	*Jefferson City*	*65109*

Main Phone Number	Main Fax Number	Website URL
(573) 751-3313	*(573) 751-9419*	*www.mshp.state.mo.us*

Department Director
Colonel Roger D. Stottlemyre, Superintendent

Number of FTE (entire department)	Approximate number of citizens served
2,050 within the Highway Patrol	*Directly or indirectly all.*

Agency Mission (brief statement)
Dedicated to Service and Protection

Department CIO and IT Division Profile (2002)

Department Name		
Missouri State Highway Patrol		
Department CIO Name		
Clifford R. Gronauer		
Street Address	City	Zip
1510 East Elm Street	*Jefferson City*	*65109*

CIO Phone Number	CIO Fax Number	E-Mail Address
(573) 526-6200	*(573) 526-6274*	*cgronaue@mail.state.mo.us*

CIO Membership in Professional Associations – Leadership Role Involvement (i.e., NASCIO – serve on architecture standards committee)

IT Division Name	Website URL
Information Systems Division	*www.mshp.state.mo.us*

Number IT FTE (located in central office)	Number IT FTE (located in field)
Eighty-two (82)	*None*
Total $$ value of FY03 IT requests submitted to OA Budget and Planning	Total $$ value of FY03 IT requests funded
$26,738,090	*$15,154,864*

Security Officer Name	Phone No.	E-mail
Tim Schlueter	*(573)751-3313*	*tschluet@mshp.state.mo.us*
Privacy Officer Name	Phone No.	E-mail
Tim Schlueter	*(573)751-3313*	*tschluet@mshp.state.mo.us*
ITAB Alternate Name	Phone No.	E-mail
Vic Buechter	*(573)526-6201*	*vbuechte@mail.state.mo.us*
SDC Steering Committee Rep Name	Phone No.	E-mail
Clifford R. Gronauer	*(573)526-6200*	*cgronaue@mail.state.mo.us*

Department Technology Profile (2002)	
Department Name	
Missouri State Highway Patrol a Division of the Department of Public Safety	
Main Processors (IBM 390 with MVS, UNIX AIX, UNIX Sun, etc.)	
Mainframe	*State Data Center IBM 390 with MVS*
PC Servers	*RS/6000 with AIX, Windows NT, Linux*
Mid-range	*AS/400 with OS/400, RS/6000 with AIX and Linux*
Networked	*RS/6000 with AIX and Linux, Windows NT*
Desktop (Windows XP, 3270, Linux, etc.)	
PC	*Windows 98/2000/XP and Linux*
Dumb terminal	*None, Outside agencies being served have some*
Network Protocols (TCP/IP, SNA, IPX, etc.)	
TCP/IP, SNA,	
Internet Connections (DSL, Cable, Dialup, etc.)	
Cable, Dialup	
Internet Service Provider (MORENET, AOL, etc.)	
MORENET	
Security Provisions (packages, anti-virus, filters)	
Network	*McAfee, Firewalls, Encryption, VPN, IBM Everyplace Wireless*
Desktop	*McAfee Virus Scan*
Internet	*McAfee, Firewalls, Encryption*
Help Desk Packages (Magic, GWI)	
Allen Systems' IMPACT	
Database Management Systems (DB2, Oracle, SQL, etc.)	
DB2, Oracle, SQL, SUPRA, ACCESS	
Development Tools (COBOL, CICS, Advantage:Gen, Websphere, .NET, etc.)	
COBOL, CICS, Advantage Gen, Websphere, Focus, Web Focus, Vision Results, Mantis, Java	
E-Mail Packages (Exchange, Lotus Notes, etc.)	
Lotus Notes	
Encryption Packages (SSL, PGP, etc.)	
VPN, SSL, IBM Personal Communications and Everyplace Wireless	

Version Control Packages (Source Safe, Panvalet, InterSource, etc.)
Librarian at the State Data Center
Telecommunications (T1, Frame Relay, etc.)
T1, Frame Relay, VTAM, MAN
GIS (ArcView, MapInfo)
GPS

Department of Insurance

Introduction

The mission of the Information Services section of the Missouri Department of Insurance (MDI) is to develop and establish procedures, rules, policies, systems and services related to computer and other technologies that help satisfy the critical achievement requirements of Information Services customers throughout the department. Furthermore, Information Services must fulfill the traditional data processing mission of providing a dependable, efficient and secure computing and communication infrastructure; acting as stewards for the department's data and information resources.

Background

The MDI's Information Services section supports the department's core business and regulatory functions and consists of mainframe and mini computers, local-area networks, wide-area networks and approximately 200 personal computers. The MDI systems and programming staff share mainframe computer resources provided by the Office of Administration's Technical Services group.

MDI's primary information system resides on a client/server system running Windows/NT and the Oracle database suite. This system consists of insurance agent and broker licensing modules, company licensing and monitoring modules, and consumer complaint and information modules. Personal computers are an integral part of the MDI network and are used for a wide variety of personal productivity and automation activities such as word processing, data analysis, and provide the gateway to locally networked, mainframe and Internet applications.

Accomplishments

Information Infrastructure

- ***Security Initiatives and Upgrades:*** MDI's Information Systems resources were methodically strengthened during the year with upgrades to the physical areas and backup power supplies as well as tightening of desktop and network access procedures and password security throughout the Department. MDI's self-maintained security Firewall was retired in favor of utilizing the State Data

Center's more sophisticated security Firewall for external connectivity. Additionally, improved network monitoring software was installed to track unusual activity and identify hardware failures.

New Systems/Software Implementation

- ***Continuing Education (CE) Electronic Filing:*** This project provided a method for CE providers to submit their course rosters electronically, rather than on paper forms and entered manually by licensing staff. With the new system, CE providers e-mail their rosters to the department in a specified format. An MDI Licensing Technician loads the files and runs a batch process to transfer the data into the MDI's Licensing system; thus eliminating manual data entry, improving accuracy and speeding the process for CE providers and insurance producers as well.

- ***National Producer Number/License Numbering Scheme:*** The purpose of this effort, introduced by the National Association of Insurance Commissioners (NAIC), is to institute a standard numbering scheme for all insurance producer licenses in Missouri as well as nationwide, to facilitate the sharing of information between states. This effort required numerous database modifications to the MDI Licensing database, coordination with the NAIC and enabling legislation in the form of the *Single Producer License*. While this project is completed at the Missouri Department of Insurance, the NAIC is continuing to test with other states.

- ***Single Producer License:*** The purpose of this legislation is to combine insurance agent and broker licenses into a single insurance producer license for the purposes of licensing and regulation. The result of this effort will be a more efficient licensing process that meets national standards devised by the National Association of Insurance Commissioners and satisfies federal requirements outlined by Gramm-Leach-Bliley Financial Modernization Act. These efforts were completed during 2002 and will be fully implemented on January 1, 2003.

- ***Common Architecture:*** The purpose of this project was to improve the submission of data to NAIC's nationwide Producer Database and other systems by utilizing national system architecture. Common Architecture established data standards and rules, simplified the process of data transmission and dramatically reduced errors. The result was much more accurate data and timely national database to assist regulators in policing the insurance marketplace.

Information Technology Training

Recognizing the ever-changing requirements of information technologies and the impact of employee turnover on the department's information workers, the MDI joined several other agencies in a contract to obtain computer-based training for its employees. Every MDI employee has access from their own PCs to desktop courses, which include Microsoft Word, Excel, Access, and Lotus Notes email and calendaring, among others.

In addition, the I.S. staff has access to IT technical courses, such as Oracle and MS Access development, Windows 2000 network administration, and Lotus Notes.

Internet Initiatives

- ***Continuing Education Course Listing*:** Implemented a web-based Continuing Education Course Listing for all active CE courses and providers that is searchable by course provider, course style, line of insurance, and number of hours. This program helps insurance agents, brokers and others identify required CE courses and potential CE course providers.

- ***Filing Checklists:*** Posted on the MDI web site, Filing Requirements Checklists for mandatory Property & Casualty, Life & Health and Managed Care insurance companies to make help them fully and accurately complete the required regulatory filings.

- ***Supplementary Data Reports:*** Added to the MDI web site the Supplementary Data Reports created by the MDI Statistics Section. The database presentation displays all the supplementary data for P&C and L&H companies received with the annual reports.

- ***Company Search:*** The MDI provided a powerful research tool to interested consumers and others by adding to its web site a searchable company list that helps locate particular insurance companies. The list is searchable by company, company type, company status, admission date or domicile state and is linked to license types, supplementary data and complaint data. Workers Compensation companies are, likewise, linked to WC rate data.

  In its continuing efforts to improve communication, the MDI added to its web site functionality to programmatically invite public comments on insurance issues, such as mergers, medical malpractice and other stakeholder issues.

Planned Projects

Continue Mainframe Migration to Oracle

MDI maintains several legacy systems in the State Data Center's mainframe environment. These systems were developed several years ago using technology that has since become obsolete and skills that have become rare and expensive. This project will migrate these systems to MDI's Oracle environment and provide improved user interfaces as well as facilitate Web access.

The Title Plant system has been converted. The Medical Malpractice, Premium Tax and various tax credit applications are nearly completed.

Medical Malpractice Forms Filing

The Missouri Department of Insurance requires reporting of all medical malpractice claims by insurance companies on a mandatory form. The scope of this project included developing an interactive application that is accessible, with adequate security, by way of the Internet; allowing the medical malpractice form to be prepared and submitted to the Department on-line and subsequently be audited and transferred to the database.

Premium Tax and Tax Credit Calculation & Filing

The Premium Tax system, which resides on a State Data Center mainframe computer, collects tax-related information from all insurance companies licensed to do business in Missouri. MDI staff verifies the tax return data and the system coordinates with the tax payments collected by the Department of Revenue. The scope of this project will allow all types of insurance companies to complete their premium tax forms on-line, including entering all premium tax credit information.

Office Automation

Additionally, several office automation projects are planned to improve scheduling and control while streamlining approval processes. The current list includes: Exam Scheduling and Tracking, Automated Time Sheets, Leave/Vacation Requests, and Purchase Requests.

Accumulated Demand

MDI currently has a considerable backlog of IT requests. Most of these requests originate in functional areas of the department and include in-house application development, maintenance to existing systems, network and security maintenance, PC software and hardware troubleshooting as well requests to purchase PC equipment and software. Additionally, many of our legacy systems require a conversion from the mainframe environment to a client-server environment. In order to succeed in meeting the needs of the department with the limited number of IS resources available, MDI supplements the IS staff with contracted services as requirements dictate.

General Department Profile (2002)

Department Name
Missouri Department of Insurance

Street Address	City	Zip
301 W. High St	*Jefferson City*	*65109*

Main Phone Number	Main Fax Number	Website URL
(573) 751-4126	*(573) 751-1165*	*www.insurance.state.mo.us*

Department Director
Scott B. Lakin

Number of FTE (entire department)	Approximate number of citizens served
221	*100,000's*

Agency Mission (brief statement)
The mission of the Missouri Department of Insurance is to promote competition where it works and to implement regulation where competition fails so that consumers can make informed insurance purchasing decisions based on price and quality. To accomplish that mission, the department strives to: 1) ensure that consumers get the benefits for which they paid; 2) ensure competence and trustworthiness of insurance professionals; 3) ensure consumers have access to affordable and suitable coverage; and *3) ensure that insurance companies remain financially solvent so that customers get their claims paid.*

Department CIO and IT Division Profile (2002)

Department Name		
Missouri Department of Insurance		
Department CIO Name		
Tim Dwyer		
Street Address	City	Zip
301 W. High St	*Jefferson City*	*65101*

CIO Phone Number	CIO Fax Number	E-Mail Address
751-1952	*526-3416*	tdwyer@mail.state.mo.us

CIO Membership in Professional Associations – Leadership Role Involvement (i.e., NASCIO – serve on architecture standards committee)

IT Division Name	Website URL
Information Services	

Number IT FTE (located in central office)	Number IT FTE (located in field)
13	*0*
Total $$ value of FY03 IT requests submitted to OA Budget and Planning	Total $$ value of FY03 IT requests funded
Not Available	*Not Available*

Security Officer Name	Phone No.	E-mail
Willis Doss, Jr.	*751-1952*	Wdoss01@mail.state.mo.us
Privacy Officer Name	Phone No.	E-mail
Jim Casey	*751-4363*	jcasey@mail.state.mo.us
ITAB Alternate Name	Phone No.	E-mail
Bob Ortbals	*751-1952*	bortbals@mail.state.mo.us
SDC Steering Committee Rep Name	Phone No.	E-mail
Tim Dwyer	*751-1952*	tdwyer@mail.state.mo.us

Department Technology Profile (2002)	
Department Name	
Missouri Department of Insurance	
Main Processors (IBM 390 with MVS, UNIX AIX, UNIX Sun, etc.)	
Mainframe	*IBM 390 via the SDC*
PC Servers	*IBM, Dell (Windows 2000)*
Mid-range	*None*
Networked	*IBM, Dell, Gateway (Windows NT & Windows 2000)*
Desktop (Windows XP, 3270, Linux, etc.)	
PC	*Dell, Gateway (Windows 2000)*
Dumb terminal	*None*
Network Protocols (TCP/IP, SNA, IPX, etc.)	
TCP/IP	
Internet Connections (DSL, Cable, Dialup, etc.)	
Cable, Remote Dialup	
Internet Service Provider (MORENET, AOL, etc.)	
MoreNet	
Security Provisions (packages, anti-virus, filters)	
Network	*McAfee ePolicy; Windows Security*
Desktop	*McAfee*
Internet	*PIX & AIX Firewalls via the SDC, VPN*
Help Desk Packages (Magic, GWI)	
Blue Ocean: TrackIT	
Database Management Systems (DB2, Oracle, SQL, etc.)	
Oracle	
Development Tools (COBOL, CICS, Advantage:Gen, Websphere, .NET, etc.)	
Oracle Developer, MS Access, Lotus Notes, VisualAge Gen, Mark IV	
E-Mail Packages (Exchange, Lotus Notes, etc.)	
Lotus Notes	
Encryption Packages (SSL, PGP, etc.)	
Lotus Notes Encryption	
Version Control Packages (Source Safe, Panvalet, InterSource, etc.)	

None
Telecommunications (T1, Frame Relay, etc.)
56 kB lines to KC & STL + T1 to KC-NAIC (Nationwide StateNet)
GIS (ArcView, MapInfo)
Atlas GIS, Geo Access

Department of Labor and Industrial Relations

Overview

The Vision of the Department of Labor and Industrial Relations is to be the nationwide leader in providing the best working environment for all Missourians.

The Mission of the Department of Labor and Industrial Relations is to provide safe and healthy workplaces and ensure economic security for all Missourians by promoting equal access to jobs, enforcing anti-discrimination laws and awarding payment of compensation to those unemployed, injured at work and victims of crime.

The Department of Labor and Industrial Relations, through the Labor and Industrial Relations Commission; Division of Labor Standards; Board of Mediation; Division of Workers' Compensation; Division of Employment Security; Governor's Council on Disability; Commission on Human Rights; and Administration has impact on potentially *ALL* citizens in the State of Missouri. Additionally, the Department provides informational assistance to federal agencies that potentially impact citizens across the nation.

During 2002 the Department of Labor and Industrial Relations continued its progress on developing systems, implementing procedures, and providing electronic processing for its customers. The following are accomplishments, within the Office of Information Systems, for calendar year 2002:

Accomplishments

Unemployment Insurance Initial Claims

The Department of Labor and Industrial Relations continues the E-Government process of accepting Unemployment Insurance Initial Claims via the Internet. This implementation allowed Missouri to be the *first* state to provide a "Hands-Off" process for filing initial claims over the Internet. Since implementation the Department of Labor and Industrial Relations has processed a total of 72,019 claims via electronic submission through December 11, 2002. This has allowed the Department of Labor and Industrial

Relations to realize 1-800 toll charge savings of approximately $50,413.30 and an estimated staff savings of 8,402.22 hours. Online survey results indicate a very favorable acceptance of the processing. Data received from the survey will assist in fine-tuning the process for customer ease of reporting. To date approximately 28,855 customers have provided information on the survey, with regard to Initial and Continued Claims, with an overall approval rating of 97.18%.

Unemployment Insurance Continued Claims

The Department of Labor and Industrial Relations has initiated, on May 11, 2002, the E-Government process for accepting Unemployment Insurance Continued Claims via the Internet. This process provides an alternative filing method for our customers requiring continued, weekly claims filing. Since its' introduction, the Continued Claims process has accounted for 150,041 weeks of compensation being claimed. This equates to a 1-800 toll charge savings of approximately 450,123 minutes resulting in an overall savings of $31,508.61 for the Department.

Electronic Mass Claims

The Department of Labor and Industrial Relations has initiated, on July 1, 2002, the E-Government process for accepting Mass Unemployment Insurance Initial Claims via the Internet. These initial claims are sponsored by the employer and submitted electronically for direct processing into the system. Statistics from this media have been incorporated into Unemployment Insurance Initial Claims information.

Electronic 1099 Information Request

In December of 2002 the Department of Labor and Industrial Relations initiated the E-Government process to allow the request and print of 1099 Information for Unemployment Insurance via the Internet. Current and former Claimants can request Unemployment Insurance 1099 information by the Internet from up to 10 previous years.

Linking Unemployment Insurance Claimants to Missouri-WORKS!

In December of 2002 the Department of Labor and Industrial Relations, in cooperation with the Department of Economic Development, initiated the E-Government process to link Unemployment Insurance Claimants to Missouri WORKS! via the Internet. Once an Unemployment Insurance claim has been completed, this process electronically passes claimant information to Missouri WORKS! The claimant is then routed to Missouri WORKS! where they can complete a resume without reentering personal information. This process provides an easier and faster method for claimants to register with Workforce Development and helps guide them through finding a new job.

Enhanced Information Security

The Department of Labor and Industrial Relations has continued to enhance information security throughout the Department including, but not limited to:

- Installation of an Intrusion Detection System (IDS).
- Implementation of more restrictive password requirements.
- Establishment of policies to lessen the impact of SPAM emails.

- Implementation of dial-in restrictive access levels.
- Performed quarterly user account verification audits.
- Performed unauthorized file access attempt audits.
- Initiated Information Security briefings for New Employee Orientations.
- Performed periodic audits of entries to secured OIS areas.
- Revised written procedures on the handling of Federal Tax Information by computer room personnel.
- Developed MODOL-INF-19, Information Security Awareness Do's & Don'ts.
- Developed, and instituted, background screening procedures.

Help Desk

The Department of Labor and Industrial Relations established a consolidated Help Desk in January 2000 to provide support for our internal customers. During calendar year 2000 the Help Desk had 7203 problems reported with 7069 of those reported being successfully resolved during the reporting period. During calendar year 2001, the Help Desk has had 9,820 reported problems with 9,677 of those reported being successfully resolved. This indicates a current year increase of reported problems at 36% with only 1.5% pending resolution. During calendar year 2002 the Help Desk has had 11,290 reported problems with 11,187 of those reported being successfully resolved. This indicates a current year increase of reported problems at 15% with only 1% pending resolution. The total increase in current year reported problems, compared against base year 2000, indicates an increase of reported problems of 57%.

DB2 Database

The Department of Labor and Industrial Relations has established an additional mainframe subsystem in support of the Unemployment Insurance Tax System project. This production subsystem was established to replace existing production subsystem. This new subsystem will also become the repository for new mainframe production databases. New servers have been established to replace existing communication bridges. Each new server now contains twenty-one (21) individual Communications Bridges, effectively replacing five (5) servers hosting existing communications bridges. This new process provides greater reliability, ease of configuration and improves efficiency for communications. Lastly, communications have been expanded to the SAM II Data Warehouse, via DB2 Connect, to include Human Resources.

IT Capital Upgrade

The Department of Labor and Industrial Relations has replaced 53% (442) of its desktop computers. This allows better utilization of currently available technology.

Data Entry Processing

The Data Entry section of Information Systems has processed 245,774 Wage Reports for year 2002. Also processed were a substantial number of Employment Security Wage Adjustments, Pre-audits, Certifications, Field Audits, Alteration Memo's, Uncollectible, Combined Wage Claims, TRA (Claims and Benefits), Contribution Check Reconciliations, Machine Audit Reports, Vendor Error Correction, and quarterly Financial Management Equipment Invoices.

Help Desk Survey

The Department of Labor and Industrial Relations continues to initiate a comprehensive Help Desk user survey to ensure that quality control and customer service remains efficient. This survey is electronically submitted via the e-mail system. Improvement of service delivery and customer satisfaction remains at a constant ratio of 4, which equates to a 90% overall acceptance rating.

Magic Help Desk Software

The Department of Labor and Industrial Relations has initiated complete implementation of the Magic Help Desk Software. This software provides web enabled interaction, enhanced security features and allows multiple application scenarios.

PC Applications

The Department of Labor and Industrial Relations constantly looks for ways to enhance current systems, develop new systems, and integrate new development with legacy systems for increased functionality. Some of our accomplishments in this area are:

- Automated (paperless) Leave Form submission. Now DOLIR staff submits all of their leave forms electronically and they are routed to their supervisor for approval, then to timekeepers for entry. This saves both time and paper.
- Developed the National Association of State Workforce Agency Conference (NASWA) registration Database. This allows direct Internet registration. All data is maintained in an Access Database system. The registration coordinator than can add/change/delete registrations as well as run reports and mailing lists. It also accommodates invoicing and direct billing processes.

WEB Page development

The Department of Labor and Industrial Relations continues to enhance our Internet home pages providing more and better information that increases usability for our customers. Some of our accomplishments in this area include:

- Reorganized and refaced the Division of Labor Standards Internet site.
- Reorganized and refaced the Division of Workers' Compensation Internet site.
- Enhanced Unemployment Insurance Internet claims process so claimants can change their addresses to insure appropriate mailing of checks.
- Developed Internet accessibility to State Board of Mediation Board Decisions allowing interested parties the capability to review these decisions.
- Enhanced the Intranet for Print shop information and examples, as well as surplus equipment, to be viewed by all staff.
- Missouri Assistive Technology Program staff now maintains lists of assistive equipment for sale or trade in an Access Database. The public can view these lists by category on the Internet.

AS/400 Systems / Operations

The Department of Labor and Industrial Relations continues to make modifications to its AS/400 computing environment. Some of the modifications and enhancements of the past year include:

- Began using AS/400 DASD as working storage for Intel-based applications.
- Provided resources for MOTEC to conduct AS/400 classes using the Department's AS/400.
- Implemented test partition to allow staged installation of new and changed technologies.
- Evaluated alternative imaging software packages to gauge appropriateness for the Department.
- Provided resources and planning for mass importing of images by Applications Development section.
- Retired 3995-122 optical and copied images to newer technology.
- Installed new direct attached optical jukebox.
- Coordinated maintenance contracts for AS/400 hardware and software.
- Supported Department's scanning system as it reaches its end of life.

Mainframe Systems/Operations

The Department of Labor and Industrial Relations continues to make modifications to its mainframe computer environment. Some of the modifications and enhancements of the past year include:

- Produced in excess of 2 million Unemployment Insurance checks.
- Evaluated Infoprint 3000 as replacement for aging 3900 printers.
- Installed new Infoprint 6400 printer to replace existing band printer.
- Converted mainframe print from FCB to AFP.
- Implemented new Change Management System.
- Implemented MOBIUS to reduce printed output volume.
- Converted IPDS print to utilize IP connected printers.
- Support & diagnosis of CNT channel extender problem after lightning strike.
- Converted to GWI (SDC problem tracking system).
- Participated in the Disaster Recovery exercises.
- REXX rewrites to aid in move from ROSCOE to TSO.
- Upgrade to Z/OS (new operating system on Mainframe).
- Abandoned HSM backups to give better production performance.

Network Operations

The Depart Department of Labor and Industrial Relations has continued to implement numerous initiatives and undertake projects to include, but not limited to:

- Installation of new hardware and software to support Microsoft Virtual Private Network (VPN).
- Continued upgrade of mainframe print to utilize IP connections.

- Rewired Workers' Compensation central office and converted to Ethernet topology.
- Consolidation of Fraud and Non-Compliance and Crime Victims' Compensation offices to improve performance and lower costs by elimination of one data circuit.
- Move of St. Louis Human Rights office to the 505 Washington office to improve performance and lower costs by elimination of one data circuit.
- Facilitated move of St. Louis Call Center, Contributions Field, Appeals and Legal to temporary location during HVAC upgrade.
- Facilitated move of Springfield Call Center, Contributions Field and Appeals to first floor of Springfield office.
- Phasing out older technology of 3174 controllers statewide.
- Upgraded McAfee Virus Scan software to EPO management system and installed new management server.
- Collapsed 11 Windows NT domains into one Windows 2000 domain.
- Completed migration from Windows NT to Windows 2000 Active Directory as Network Operating System.
- Continued move from Token Ring topology to Ethernet topology in Department offices.
- Replaced 10 remote and 8 Central Office servers to improve response times and productivity.
- Initiated network dial-up restrictions for reduction in communications costs associated with toll free numbers.
- Added second Remote Access Service (RAS) server to increase capacity for dial-up access.

Mainframe Applications

The Department of Labor and Industrial Relations maintains vast amounts of systems and associated programs. Constant modifications, enhancements, and process changes have been normal operating procedures. Specific actions, with regard to mainframe applications are:

- Implemented new hardware / software for Interactive Voice Response.
- Implemented programming to permit Temporary Emergency Unemployment Compensation.
- Implemented programming for activation of Unemployment Insurance Continued Claims via the Internet.
- Implemented programming for activation of Unemployment Insurance 1099 data verification via the Internet.
- Converted all programming libraries to incorporate the new Library Management System.
- Converted all programming libraries from Roscoe to TSO utilization.
- Implemented programming for activation of Unemployment Insurance Benefit Assessments and Certificates.
- Implemented programming for activation of Unemployment Insurance SSN Verification.

- Implemented programming for activation of Unemployment Insurance Trade Act Extension, Phase I.
- Implemented programming for activation of Unemployment Insurance DUA Disasters 23 and 24.
- Implemented programming for activation of Unemployment Insurance UCFE and UCX procedures, phase I, with Lockheed Martin.
- Converted property system to SAM II Fixed Assets.

AS/400 Applications

The Department of Labor and Industrial Relations maintains, and develops, numerous systems on the AS/400. Specific accomplishments are:

- ***Electronic Correspondence***: Over 423,000 individual notices of upcoming docket settings were mailed out to Workers' Compensation stakeholders in FY2002. Another 265,000 were bulk mailed to various insurers, third-party administrators and attorney firms. At a time when postal rates continue to rise, the expense of continuing to use the traditional mail system has become prohibitive. The cost to send docket notices alone for FY02 was over $150,000. In 2002, programming was completed to establish a pilot project for the use of electronic mail for the delivery of docket notices. Two email formats will be used during the pilot. Customers will have the option of receiving the docket notices in a data file format or a document format, both as email attachments. The customer's choice will be based on the volume of docket notices they receive and their ability to process the information once it has been received. Customers may mix or match the formats and document types they receive through this system. Functionality is in place to add additional customers and document types as needed. Other electronic delivery options are planned for the future. This system will improve service to DWC customers, as participants will receive all electronic correspondence in one business day. The system will also provide a significant savings in future postage expense, helping to keep the costs of the Missouri Workers' Compensation system under control.

- ***Remote Adjudication Module (RAM):*** The Remote Adjudication Module Update Project was completed in March 2002. RAM version 4 continues to expand and enhance the system that was originally installed in October 1998. The system provides the DWC legal staff key case information and imaged documents on standalone laptop computers for all docket cases to allow them to make informed and timely decisions about each case and log minute entries and case resolution data. RAM Version 4 incorporated the necessary changes for Windows 2000, new legal staff laptops and the latest version for all software products supporting the system. With RAM Version 4 all legal staff will be running the RAM laptop version on the new Windows docking station laptops installed in 2001. Rollout began in March 2002 and was completed in July 2002. All RAM software products were upgraded, and OIS provided training on the new system to all Workers' Compensation legal staff.

Some of the major changes made to RAM Version 4 include the following:

- Upload / Download of local office server no longer required, saving staff and support time
- Ability to upload / download directly from the laptop at any time, providing legal staff with additional flexibility
- Ability to upload / download multiple dockets on the same laptop, allowing legal staff to cover dockets for other legal staff in their absence
- Images now downloaded to all local offices for use in RAM
- Expanded use of automatic minute entries, saving time for legal staff
- Ability to mass update case disposition, saving time for legal and support staff
- Expanded the add-on functionality of system, allowing much more flexibility for walk in cases, pre-docket notes, additional companion cases, etc.

Self Insurance

The Workers' Compensation Self Insurance Unit is responsible for the management and administration of Self Insured employers, Self Insured Trusts and Trust Members in Missouri. Major changes are needed in this area to handle expanded financial requirements, automation of the annual review process and provide improved efficiency and processing of information for staff. The Self Insurance upgrade project was started in 2002. This consists of 5 individual phases to be done back to back as follows: 1) Review of existing system and identification of current changes needed. 2) Individual Self Insured employers. 3) Self-Insured Trusts and Trust Members. 4) Self Insurance Audits. 5) Web enabling of annual review form. Phase 1, the existing system review and identification of current changes were completed. Nearly 50 individual corrections and changes identified during this phase were completed and installed. Phase 2 is well underway. JAD sessions are nearly completed in the Individual Self Insured area and we are ready to begin JAD sessions on the Trust area (Phase 3). Also pending is the approval of new forms for the Annual Review, which will cross-functional areas and will be reviewed when they are completed. At this time, the Self Insurance project is scheduled for completion in 2003.

Image Import of Benefits Documents

An average of 3,000 documents with over 20 different document types are printed each night to assist in the administration and monitoring of Employment Security benefits. This project involves the collection, importing and indexing of these documents into the DOLIR Imaging System. All analysis, design, programming and imaging system interfaces were completed in 2002 and are in production. The actual processing of data into the system consists of the following phases: 1) Conversion of 580,000 back file documents printed prior to June 1, 2002. 2) Modification of overlay form and conversion of additional 300,000 documents printed from June 1, 2002 - November 1, 2002. 3) Modification of overlay form and conversion of remaining back file documents from November 1, 2002 - present. 4) Ongoing nightly processing of production documents. Of the data processing steps, Phase 1 has just been completed. We anticipate completion of stages 2 through 4 by the end of the year.

EDI

Voluntary submission of EDI by Workers' Compensation stakeholders for the First Reports of Injury has continued to grow significantly in 2002. For the first time ever, in 2001, more reports were received electronically than on paper, and in 2002, nearly 60% of all First Reports of Injury have been received electronically. The number of trading partners currently submitting electronic First Reports of Injury has grown to 50. The use of EDI has saved data entry and postage expense for Workers' Compensation. OIS continued to make EDI programming changes in 2002 to improve data accuracy, reduce errors, add functionality and streamline the workload. Programming is currently ongoing to accommodate changes to the EDI input edits as a first step towards a planned mandate in 2003.

J Walk and Image software upgrades

The unit completed the upgrade of J Walk software from Release 3.1c9 to 3.2c9 and upgraded to Release V5R1 of the Visual Info image software for 200 laptop/desktop computers in 2002. J Walk software was repackaged and distributed to all customers.

Planned Projects:

- UI Validation
- Internet UCX, UCFE and CWC
- Internet Contributions and Wage Reporting
- Direct Deposit of TRA checks
- Upgrade Internet UI Mass Claims process to be hands-off capable
- TRA modifications for issues and overpayment calculation
- Wage Record Interchange System
- Phase II of UCFE/UCX modifications
- Intranet Co-Registration joint venture with Department of Revenue
- Online file error correction for customers
- Expansion of Electronic Correspondence
- Upgrade Self Insurance system
- AICS Web Implementation
- Upgrade AICS Workers Safety system
- Convert from SIC code to NAIC code
- Web enable First Report of Injury
- Expand EDI to include:
  - First Report of Injury
  - First Report of Injury Change, Correction, Denial record types
  - Subsequent Report of Injury
  - FTP EDI submissions
- Upgrade VPN solution to newer hardware and software
- Continue phasing out 3174 controllers
- Move Fraud and Non-Compliance and Crime Victims' Compensation office to Ethernet topology

- Move Labor Standards office to Ethernet topology
- Complete rewire of DOLIR Building for Ethernet topology
- Install new firewall on private side of network
- Upgrade email server hardware and software to Exchange 2000
- Replace Cisco 5500 core switch at 421 East Dunklin
- Continue migration to Ethernet topology
- Continue replacement of older servers
- Implementation of new Scanning Subsystem for DOLIR Imaging
- Imaging project to move from green screen environment to browser based clients
  - Connect AS/400 to mainframe by IP
- Continue to expand use of MOBIUS as an alternative/replacement for printed output
- Evaluate phasing out ESCON channel driven devices
- Provide Semi-Annual review of Policies and Procedures to ensure accuracy, effectiveness, compliance, and completeness (as per Information Security Principles and Policies, section IX).
- Provide unscheduled security audits on all Divisions within DOLIR with the DOLIR CIO (time permitting).
- Develop and collect Information Security metrics concerning (a) Information Security Awareness (i.e. number of employee reminders, Information Security Awareness trainings, etc per year) and (b) Incidence Responses (number of virus alerts, average downtime per virus infections, etc).
- Implement annual computer-based training (CBT) on Information Security for all DOLIR employees (funding permitting).
- Perform quarterly user account verification audits.
- Perform periodic unauthorized file access attempt audits.
- Provide informational security briefings at all New Employee Orientations.
- Perform periodic audits of entries into secured OIS areas.
- Implement Information Security Condition standards.

Accumulated Demand

The demand for services is ever increasing. The Department of Labor and Industrial Relations strives to meet all requirements while continuing to provide quality products. Although some requirements may be of greater business importance all processing requirements will be reviewed. At times the demand for service outweighs the ability of Information Systems to provide requested support. Business requirements, process improvements, and electronic procedures that enhance existing systems will be addressed as personnel availability allows.

The Office of Information Systems' current demand for support of applications; whether new development, system enhancement, or maintenance of legacy systems is estimated at approximately 81,525 hours based on our current backlog of request for services'. Based on personnel availability, and assuming no additional request for services' are initiated,

the estimated hours equate to a 2.4 year backlog at the Office of Information Systems' current applications development staffing ratio.

The Office of Information Systems' current demand for support of network services and systems support, based on personnel availability, and assuming no additional request for services' are initiated, is estimated at 18 to 24 months backlog at the Office of Information Systems' current staffing ratio.

Department of Labor and Industrial Relations Profile (2002)

Department Name
Department of Labor and Industrial Relations

Street Address	City	Zip
3315 West Truman Boulevard, *PO Box 504*	*Jefferson City*	*65102-0504*

Main Phone Number	Main Fax Number	Website URL
(573) 751-9691	*(573) 751-4135*	*www.dolir.state.mo.us*

Department Director
Ms. Catherine B. Leapheart

Number of FTE (entire department)	Approximate number of citizens served
1185 Full Time and 124 Part Time	*The Department of Labor and Industrial Relations, along with all divisions within its' operational control, has impact on potentially ALL citizens in the State of Missouri. Additionally, the Department provides informational assistance to federal agencies that potentially impacts citizens across the nation.*

Agency Mission (brief statement)
Our mission is to strive to provide employees with safe and healthy workplaces and ensure economic security for all Missourians by promoting equal access to jobs, enforcing anti-discrimination laws and awarding payment of compensation to unemployed, injured workers and victims of crime. In addition, the Department strives to provide Missourians with equal employment opportunities while it also strives to prevent and eliminate unlawful discrimination. The Department provides educational information to Missourians regarding their rights and responsibilities under the labor laws.

Department CIO and IT Division Profile (2002)

Department Name		
Department of Labor and Industrial Relations		
Department CIO Name		
Mr. Jearl E. Reagan I		
Street Address	City	Zip
421 East Dunklin Street, *P.O. Box 59*	*Jefferson City*	*65104-0059*

CIO Phone Number	CIO Fax Number	E-Mail Address
(573) 751-3284	*(573) 751-0167*	*jreagan@dolir.state.mo.us*

CIO Membership in Professional Associations – Leadership Role Involvement (i.e., NASCIO – serve on architecture standards committee)
Board of Advisors, Public Sector CXO; Information Technology Advisory Board; State Data Center Evaluation Committee; National Association of State Workforce Agencies; America's Job Link Alliance Advisory Board; Unemployment Insurance Program and Technology Executive Committee; Chairman, Information Technology Portfolio Evaluation Committee

IT Division Name	Website URL
Office of Information Systems	*www.dolir.state.mo.us/infosystems*

Number IT FTE (located in central office)	Number IT FTE (located in field)
71.50	*N/A*
Total $$ value of FY03 IT requests submitted to OA Budget and Planning	Total $$ value of FY03 IT requests funded
N/A	*N/A*

Security Officer Name	Phone No.	E-mail
Mr. Fernando Mendez	*(573)751-7030*	*fmendez@dolir.state.mo.us*
Privacy Officer Name	Phone No.	E-mail
Mr. Ronald J. Miller	*(573)751-3856*	*rmiller@dolir.state.mo.us*
ITAB Alternate Name	Phone No.	E-mail
Mr. John K. Namassy	*(573)751-0121*	*jnamassy@dolir.state.mo.us*
SDC Steering Committee Rep Name	Phone No.	E-mail
Mr. Alan D. Spears	*(573)526-3586*	*aspears@dolir.state.mo.us*

Department Technology Profile (2002)	
Department Name	
Department of Labor and Industrial Relations	
Main Processors (IBM 390 with MVS, UNIX AIX, UNIX Sun, etc.)	
Mainframe	*IBM 390 with MVS at State Data Center*
PC Servers	*Microsoft Windows NT, Microsoft Windows 2000, Linux*
Mid-range	*IBM AS/400 Model 830 2402 with OS/400 V4.5*
Networked	*N/A*
Desktop (Windows XP, 3270, Linux, etc.)	
PC	*Windows NT, 2000, XP, OS2*
Dumb terminal	*N/A*
Network Protocols (TCP/IP, SNA, IPX, etc.)	
TCP/IP and SNA	
Internet Connections (DSL, Cable, Dialup, etc.)	
MAN	
Internet Service Provider (MORENET, AOL, etc.)	
MORENET	
Security Provisions (packages, anti-virus, filters)	
Network	*McAfee, Trend Micro Scan Mail*
Desktop	*1300 McAfee*
Internet	*IDS, firewalls*
Help Desk Packages (Magic, GWI)	
Magic	
Database Management Systems (DB2, Oracle, SQL, etc.)	
DB2, SQL, Access Database	
Development Tools (COBOL, CICS, Advantage:Gen, Websphere, .NET, etc.)	
COBOL, CICS, Assembler, SAS, Cool:Gen, Advantage: 2E, Advantage: Plex, RPG, Jwalk, VB, Java, Websphere/VAJ, Homesite (HTML Editor)	
E-Mail Packages (Exchange, Lotus Notes, etc.)	
Exchange	
Encryption Packages (SSL, PGP, etc.)	

SSL
Version Control Packages (Source Safe, Panvalet, InterSource, etc.)
Library Management System
Telecommunications (T1, Frame Relay, etc.)
T1, Frame Relay
GIS (ArcView, MapInfo)
N/A

Missouri Lottery Commission

Accomplishments

External Access to Email

The necessary procedures and methodologies were developed to allow for employees to have complete secure access to their electronic mail from outside the office. This access was accomplished using the employee's local ISP and the internal URL for the mail system. Establishing this access has provided a new avenue of information sharing which will help employees to better serve their customers, the businesses and citizens of Missouri.

Revise Telemarketing Application / Ticket Ordering

With the ever-increasing call load for Lottery Telemarketing Reps, there was a definite need to change the original application to a more streamlined and user-friendly interface. The original application resided on the mainframe and had a number of limitations that made streamlining calls more difficult. The changes allow for a more productive call and also facilitate retailer initiated ticket orders through more automated methods. The system design effort resulted in the new Inside Sales Studio, a JAVA/JSP based application that replaced the existing telemarketing program. The use of different windows allows the telemarketer to see information on a specific retailer in one window, a list of all active Scratcher and pull-tab games in an order format in another, and sales information on another window. This format helps speed up the process of taking the order with built in warnings of low inventory and possible inventory recommendations that allow the telemarketer to better serve the retailer. This allows the telemarketer to potentially place the order without contacting the retailer. The system is also used to place certain retailers on bi-monthly calls. This provides more time for the telemarketer to talk to the retailer about any upcoming lottery news, promotions and up selling products. The end result of this effort has allowed sales staff to provide much better service and support for the retailers of Missouri.

Keno

In January of 2002, the Missouri Lottery Commission approved the online game of KENO in order to increase the revenues for fiscal year 2003. A very aggressive time

schedule for the online vendor and the Missouri Lottery staff was necessary to meet the June 1, 2002 start date. The addition of a new online product affected the entire scope of the business including retail licensing, retail incentives, accounts receivable, prize payment and management information subsystems. Along with the impacts on back office systems came an additional need for new retailer recruitment and retailer retention incentives. Software was developed to manage these new licensing and marketing needs with added flexibility to allow staff to continually monitor and adjust these new programs. The efforts put forth resulted in a successful roll out of KENO on schedule and with very minimal problems.

$10 Scratcher Ticket

In the summer of 2002, the Missouri Lottery launched its first $10 Scratcher ticket. Although the existing marketing strategy incorporated numerous ticket price points, this was the first game with a value of $10 or higher. With the price point being 2-digits, this posed a potential truncation issue with vendor and internal software. A complete and thorough review of all software was performed as well as a complete systems test. The new $10 Scratcher sales and revenues have played a significant role in the Lottery's efforts to meet current revenue goals. Feedback from both players and retailers has been very positive.

Ticket Consignment

Ticket Consignment was implemented to give retailers more flexibility on their payments for Lottery Scratcher products and to encourage stocking of more games, thus increasing sales and revenue potentials. In the past the retailer determined the length of time they could hold product prior to being billed, either 0, 1, 2, or 4 weeks, whichever option best suited their own accounting needs. This limited flexibility proved, over time, to be restrictive to encouraging smaller retailers to carry more products since billing was based on the delivery schedule rather than the actual sale of the product.

Two more options were added in order to encourage the distribution and sales of more games. One of the new options parallels the existing billing with the exception that the delay time period is based on the first ticket validated from the pack instead of the shipping date. This gives the retailer the opportunity to carry a lot more ticket stock, thus ensuring fewer 'out of stock' conditions. The second added option, referred to as 90/60, is also based on the pack being 'activated' by the validation of any of the prizes within the pack. The billing, however, does not drop to the retailer's account until the retailer has sold 90% of the Scratcher pack, determined by the number of valid prizes paid for the pack. If, for some reason, the retailer never gets to 90%, they will be billed after 60 days from the first validation for a ticket from that pack. First full quarter distribution and validation figures have shown that this change has made a significant difference in net revenues.

180-Day Validation

Legislation passed in spring 2002 mandated the Missouri Lottery change the validation period for winning tickets from one year to 180 days. Although this did not require extensive software changes for the Scratcher product, it did result in several changes that

necessitated an extensive systems test to ensure proper implementation. There were also a number of changes required of the online vendor that mandated extensive software modifications and a complete systems test of the online terminals and software.

WEB Site Scratcher Prizes Remaining Notification

Demand from players regarding the availability of high-tier prizes remaining for individual Scratcher games led to the development and implementation of a new section on the Lottery's WEB site. Until recent changes in the Lottery's WEB environment, this information could only be provided through manual processes that were very labor intensive and were prone to being outdated very quickly. The new WEB pages allow players to see how many prizes are left in the game, based on validations-to-date, and how much money those prizes are worth. There is also detailed information regarding each game including how to play instructions, prize structure and game expiration date. This information educates players, making them more comfortable with their Lottery purchase decisions.

Planned Projects

CY03 WEB Initiatives

The Lottery is committed to providing extraordinary customer service to its players, retailers, legislature and other agencies. The Internet provides a channel which, when properly configured, allows state-of-the-art technologies to give the customers what they want, when they want it. The Lottery is interested in providing information, education and entertainment to citizens through the Internet. This is a robust environment that allows the Lottery to disseminate as well as collect information. There are many applications and small projects affiliated with this initiative, including E-Business and E-Commerce usage that will streamline business and provide quality service to our customers. WEB projects anticipated include:

- *Retailer Access* Provide retailers access to all of their accounting, sales, prize payment information, retailer application and licensing requests through the WEB.
- *Player's Club* Establish a password-protected area of the WEB where players can enter special promotions, participate in club related initiatives and enjoy special benefits created for this environment.
- *Relationship Marketing Initiatives* Begin to develop a relationship with players to provide them information and value added services based on their loyalty to Lottery products and promotions.
- *WEB Market Research Initiatives* Utilize the WEB to provide cost effective and faster research information that will allow the Lottery to improve product offerings, promotions and services.

Daily Call Summary Project

Recognizing success experienced by telemarketing staff with the newly implemented Inside Sales Studio, the Lottery strategic goal is to tailor similar improvements into the field sales section of the business. Using the Inside Sales Studio as a starting point and source of input, the Daily Call Summary (DCS) project will bring together diverse information and technologies. The initial DCS will provide a wide variety of information to the field rep primarily in a hard-copy format. This hard-copy portion of the DCS will be implemented on a very aggressive time schedule. Dovetailed with this implementation will be efforts to electronically connect the field staff with home offices, other field staff and the retailer network through the use of hand held devices. Providing this information and technology will open the door for a wide range of services that can be provided to retailers.

Marketing Status Quo

Based on past experience with the diverse environment of the Lottery industry, it is both anticipated and expected that a number of system requirements both large and small will be required in the coming year. These systems can and will be as simple as changing existing game matrixes to adding complete new products to the mix of Lottery offerings. These changes are inherently diverse and unpredictable as the Lottery industry is ever changing and reactionary to trends, legislation and marketplace. As in the past year, a number of marketing initiatives will involve the world-wide-web and will include use of surveys, second-chance draws and other promotions.

Accumulated Demand

The Lottery has a small IT staff and must rely on the ability of staff to be diverse and flexible in the technology disciplines used within the organization. The limited staff size can translate into lower productivity periods when there is turnover and the need arises to train new staff. There is currently a backlog of approximately 2.75 man-years of service requests and projects. The demand for IT services continues changing from mainframe COBOL to WEB initiatives and ORACLE database applications. Therefore there remains some overhead in staff training and transition that has affected the backlog of requests.

General Department Profile (2002)

Department Name
Missouri Lottery Commission

Street Address	City	Zip
1823 Southridge Dr	*Jefferson City*	*65109*

Main Phone Number	Main Fax Number	Website URL
(573) 751-4050	*(573) 751-5188*	www.molottery.com

Department Director
Jim Scroggins

Number of FTE (entire department)	Approximate number of citizens served
178.5	*5.6 million*

Agency Mission (brief statement)
To maximize revenues for public education through the creation and sale of fun and entertaining products consistent with the highest levels of service, integrity and public accountability.

Department CIO and IT Division Profile (2002)

Department Name		
Missouri Lottery Commission		
Department CIO Name		
Mike Wankum		
Street Address	City	Zip
1823 Southridge Dr	*Jefferson City*	*65109*

CIO Phone Number	CIO Fax Number	E-Mail Address
(573) 526-7492	*(573) 751-5188*	wankum@molottery.com

CIO Membership in Professional Associations – Leadership Role Involvement (i.e., NASCIO – serve on architecture standards committee)
NASPL Technology Committee

IT Division Name	Website URL
Administration – Data Processing	www.molottery.com

Number IT FTE (located in central office)	Number IT FTE (located in field)
20	*0*
Total $$ value of FY03 IT requests submitted to OA Budget and Planning	Total $$ value of FY03 IT requests funded
$0	*$0*

Security Officer Name	Phone No.	E-mail
Wanda Hawkins	*751-4050*	hawkiw@molottery.com
Privacy Officer Name	Phone No.	E-mail
ITAB Alternate Name	Phone No.	E-mail
Ron Murphy	*751-4050*	murphr@molottery.com
SDC Steering Committee Rep Name	Phone No.	E-mail

Department Technology Profile (2002)	
Department Name	
Missouri Lottery Commission	
Main Processors (IBM 390 with MVS, UNIX AIX, UNIX Sun, etc.)	
Mainframe	*Stratus Continuum 1225 with VOS*
PC Servers	*Compaq Proliant with Novell and NT*
Mid-range	
Networked	
Desktop (Windows XP, 3270, Linux, etc.)	
PC	*Windows 2000*
Dumb terminal	*VOS*
Network Protocols (TCP/IP, SNA, IPX, etc.)	
TCP/IP, X25, IPX	
Internet Connections (DSL, Cable, Dialup, etc.)	
MAN	
Internet Service Provider (MORENET, AOL, etc.)	
MORENET	
Security Provisions (packages, anti-virus, filters)	
Network	*Symantec Anti-Virus*
Desktop	*Symantec Anti-Virus*
Internet	*Symantec Anti-Virus*
Help Desk Packages (Magic, GWI)	
N/A	
Database Management Systems (DB2, Oracle, SQL, etc.)	
Oracle, SQL	
Development Tools (COBOL, CICS, Advantage:Gen, Websphere, .NET, etc.)	
COBOL, FMS, SGI/DBQ, Oracle Forms & Reports, Forte, Dreamweaver, TOAD, ANT, Java, JSP, Tomcat, SAS (PC)	
E-Mail Packages (Exchange, Lotus Notes, etc.)	
Novell Groupwise	
Encryption Packages (SSL, PGP, etc.)	
N/A	

Version Control Packages (Source Safe, Panvalet, InterSource, etc.)
CVS
Telecommunications (T1, Frame Relay, etc.)
T1
GIS (ArcView, MapInfo)
ArcView, MapInfo

Department of Mental Health

Accomplishments

CIMOR

The Department has contracted with iServ Systems to configure and deploy a web-based application. We plan to complete full system implementation in 2003.

The department continued progress on a new core information system called CIMOR – Customer Information Management, Outcomes and Reporting system. CIMOR is a web-based application that will replace many central and facility-based systems that track our consumers, providers, contracts, services, billing information, and claims processing. This application will be used by all DMH facilities and by hundreds of DMH contracted providers. CIMOR is critical to enable DMH to meet HIPAA requirements.

iServ Systems is the primary contractor working to configure and deploy CIMOR. The Department and iServ have jointly worked on requirements definition, data modeling, technical planning and deployment, and all other activities associated with a large-scale software development and implementation project. Several releases were delivered in late 2001 and 2002, with additional functionality included to meet DMH requirements.

To date, as a result of technology and deployment decisions, the cost of the CIMOR project is running about 20% below original estimates. The project is also on schedule, with targeted go-live in July 2003 for financial functions required for HIPAA compliance.

SATOP (Substance Abuse Traffic Offender Program)

Implemented the State Alcohol Traffic Offender Program in July 2001. This system enables our program providers the ability to track clients who must attend the program. It automatically notifies the Department of Revenue upon successful completion so that the license reinstatement process timeframe is greatly reduced. The electronic notification has significantly reduced data entry work for the Department of Revenue.

SPIN (Strategic Performance Information Network)
Implemented the DMH Strategic Planning Initiatives system. SPIN tracks the departmental initiatives driven by the DMH Strategic Plan and produce outcomes for those initiatives.

DMH Security Officer
Established the DMH Security Officer position. This position will establish and implement best practices in security to ensure compliance with regulations such as the federal HIPAA guidelines and state Homeland Security plans.

CPORS (Central Office Purchase Order Request System)
Implemented a web-based application to support centralized IT purchasing for facility and Central Office needs.

Change Control
Implemented a formal change control procedure for our Windows Server platform applications.

FSR (Food Services Request System)
Completed the Food Services Request system. This was our first .NET platform application.

Local Area Network Modernization
DMH has upgraded local networks at 27 statewide facilities, as well as central office, to a switched Ethernet-based LAN infrastructure based on Category 5 wiring. The few remaining unfinished projects are near completion.

Windows 2000 Implementation
The majority of all DMH desktops statewide have been converted to the DMH (Windows 2000) domain. Central Office, as well as the DMH facilities, are now in the process of migrating all servers over to the DMH domain. Standardization and lower total cost of ownership are but two advantages provided by having all users, workstations, and servers on one domain.

Desktop Management
DMH continues replacing workstations to bring the organization to a desktop standard. Migration to Windows XP and Office XP is also in progress. The goal is lower total cost of ownership based on a standardized desktop that can be managed more efficiently.

Wide Area Network Modernization
Statewide network capacity has been improved through standardization and management. Many wide area network connections have been upgraded in anticipation of the CIMOR system. Quality of Service software is being tested and will provide effective throughput for DMH's critical applications.

DMH Computer Room

The DMH Computer Room has been redesigned to accommodate the large number of servers and network equipment required for the CIMOR system.

Data Warehouse Migration: ODS Creation Phase

The migration of DMH data from Oracle to SQL and from Unix to Windows is well under way. SAM II data has been moved to the new platform and is being used in a production environment. The new Data Warehouse will include an Operational Data Store and a warehouse of data in dimensional models.

Planned Projects

- Implementation of common pharmacy system, linked to CIMOR, at seven hospital sites. This is part of the extended CIMOR project.
- Implementation of a common dietary system at all residential facilities. An RFP is being prepared.
- Deactivation of all legacy/mainframe systems. This is scheduled for late 2003.
- Conversion of all in-house systems to the .NET platform.
- Implementation of a fully capable IT Asset Management system. Alternatives are being evaluated.

Accumulated Demand

Several IT project requests are waiting for resources. These include:

- Implementation of imaging systems at facilities and Central Office.
- Improved document management.
- Deployment of CIMOR to more mobile devices to support clinical work.
- Establishment of several video-conferencing locations at facilities to reduce travel expenses and support remote clinical activities.
- Improved Internet management.
- A full evaluation of Voice Over IP for several DMH phone systems.

General Department Profile (2002)

Department Name
Missouri Department of Mental Health

Street Address	City	Zip
1706 E Elm St	*Jefferson City*	*65101*

Main Phone Number	Main Fax Number	Website URL
573-751-4122	*573-751-8224*	*www.modmh.state.mo.us*

Department Director
Dorn Schuffman

Number of FTE (entire department)	Approximate number of citizens served
10,000	*140,000*

Agency Mission (brief statement)
Establish philosophy, policies, standards and quality outcomes for prevention, education, habilitation, rehabilitation, and treatment for Missourians challenged by mental illness, substance abuse/addiction, and developmental disabilities.

Department CIO and IT Division Profile (2002)

Department Name		
Missouri Department of Mental Health		
Department CIO Name		
Gary Lyndaker		
Street Address	City	Zip
1706 E Elm St	*Jefferson City*	*65101*

CIO Phone Number	CIO Fax Number	E-Mail Address
573-751-9121	*573-526-6033*	*mzlyndg@mail.dmh.state.mo.us*

CIO Membership in Professional Associations – Leadership Role Involvement (i.e., NASCIO – serve on architecture standards committee)
Project Management Institute (PMI)

IT Division Name	Website URL
Office of Information Systems	*www.modmh.state.mo.us/homeinfo/offices/ois/infosy.html*

Number IT FTE (located in central office)	Number IT FTE (located in field)
74	*80*
Total $$ value of FY03 IT requests submitted to OA Budget and Planning	Total $$ value of FY03 IT requests funded
$11,040,172	*$11,040,172*

Security Officer Name	Phone No.	E-mail
Ed Meyers	*573-751-8095*	*mzmeyee@mail.dmh.state.mo.us*
Privacy Officer Name	Phone No.	E-mail
Ann Dirks-Linhorst	*573-522-6164*	*mzdirka@mail.dmh.state.mo.us*
ITAB Alternate Name	Phone No.	E-mail
Dean Williams	*573-526-4098*	*deanwilliams@mail.dmh.state.mo.us*
SDC Steering Committee Rep Name	Phone No.	E-mail
Michael Marcus	*573-526-5668*	*mzmarcm@mail.dmh.state.mo.us*

Department Technology Profile (2002)	
Department Name	
Missouri Department of Mental Health	
Main Processors (IBM 390 with MVS, UNIX AIX, UNIX Sun, etc.)	
Mainframe	*purchase computing services from OA*
PC Servers	*IBM xSeries (x440, x360, x350, x342, x335, x330, x240), 8500R*
Mid-range	*IBM AS/400 (500,620,720,S20,170), IBM SP (UNIX AIX)*
Network	*CISCO 6500, 7200, 3600, 2610, 2612*
Desktop (Windows XP, 3270, Linux, etc.)	
PC	*Windows XP, DELL Optiplex GX 150*
Dumb terminal	
Network Protocols (TCP/IP, SNA, IPX, etc.)	
TCP/IP	
Internet Connections (DSL, Cable, Dialup, etc.)	
MORENET via MAN connection to OA	
Internet Service Provider (MORENET, AOL, etc.)	
MORENET	
Security Provisions (packages, anti-virus, filters)	
Network	*Norton Anti-Virus (server), Antigen (e-mail)*
Desktop	*Norton Anti-Virus (desktop)*
Internet	*PIX 520 Firewall, CISCO Secure IDS (Intrusion Detection Sensor),*
Help Desk Packages (Magic, GWI)	
Heat	
Database Management Systems (DB2, Oracle, SQL, etc.)	
SQL Server, Oracle, IMS, DB2, DB2-400	
Development Tools (COBOL, CICS, Advantage:Gen, Websphere, .NET, etc.)	
.NET, Visual Interdev, Visual Studio, Crystal, ERWIN, Cool:Gen	
E-Mail Packages (Exchange, Lotus Notes, etc.)	
Exchange	
Encryption Packages (SSL, PGP, etc.)	
SSL, Triple DES, MD5	
Version Control Packages (Source Safe, Panvalet, InterSource, etc.)	

Source Safe
Telecommunications (T1, Frame Relay, etc.)
DS-3, T1, Frame Relay
GIS (ArcView, MapInfo)
ArcView

Department of Natural Resources

Overview

The Department of Natural Resources' (DNR) mission is "to improve the quality of life and economic well being of all Missourians by fostering the prudent use and protection of our air, land, water, cultural, and energy resources." Core business functions that enable mission accomplishment include resource regulation and enforcement, service delivery, resource planning, management and support services.

The department's information technology environment exists to support the core business functions and consists of mainframe and mini computers, wide area networks and a variety of personal computers (PCs). The State Data Center (SDC) maintains the mainframe computer primarily utilized by the department. The SDC managed mainframe hosts several significant software applications. Examples include a Public Drinking Water System used to support environmental policies and regulations and an Energy Loan System used to manage loans made available to schools for energy efficiency initiatives. Remote connections to other mainframe computers such as the United States Environmental Protection Agency's National Computer Center are also used to process large data sets.

Mini computers and PCs are used to support department Geographic Information System (GIS) activities, and laboratory analysis of water and air samples. Wide area networks service approximately 2,058 department employees by providing the data sharing links for the department's program, regional and district offices. Also, the PCs are an integral part of the network environment and are used for a wide variety of automation activities such as word processing, data analysis, graphics tasks, and to access network and mainframe applications.

The Department of Natural Resources is committed to enhancing service levels by improving access to department staff and information. To help meet this commitment, the department completed an Information Strategic Plan (ISP) in 1995. The department's ISP identified customers, the services they require, and the information needed to provide those services. Implementation of the plan is proceeding and will promote enforcement activities, responsiveness to public inquiries and coordination of departmental

information systems. ISP projects will facilitate making information readily available to department employees, other state and federal agencies, and the Missouri public.

The automation environment implemented and maintained by the DNR facilitates the department's ability to promote an understanding of natural resource issues, advocate public debate and encourage environmental stewardship. It also promotes responsible economic development by providing access to information regarding environmentally safe practices.

Accomplishments

Current initiatives and accomplishments have occurred in three major areas: infrastructure, Internet and software systems. Also, all initiatives and accomplishments are interdependent. The DNR could not implement software systems and Internet capabilities without an appropriate infrastructure, and many software systems must be "Web-enabled."

Infrastructure

Commencing with fiscal year 1996, the Missouri legislature approved several DNR appropriation requests that support ISP-identified projects. Of these, a FY1998 request focuses on the department's automation infrastructure and addresses two primary goals. First, the department's automation environment must be implemented and maintained in such a manner that it is ready to support emerging business needs. Second, the department must manage and control the cost of implementing and maintaining our data processing environment. In addition, the DNR continues to collaborate with the United States Environmental Protection Agency (USEPA) to address electronic reporting of environmental data. These on-going initiatives will facilitate the consolidation of reporting requirements, increase Internet access to data, reduce the reporting cost for industry and improve the integration of environmental data.

FY2002 automation infrastructure initiatives included cabling infrastructure items, network management tools, file servers, and end-user and support staff training. Cabling infrastructure activities remained focused on upgrading the department's local area network environment to 100mbps-ethernet technology. FY2002 was the third year of the five-year Ethernet project. Sites upgraded included:

- Air and Land Division's Kansas City Regional Office, Southeast Regional Office (Poplar Bluff) and Southwest Regional Office (Springfield);
- Division of State Parks' Lake Ozark, Lebanon, and the Interpretative Program sites;
- Outreach and Assistance Center's Historic Preservation Program and the Kansas City Urban Outreach Office;
- Two buildings at the Geological Survey and Resource Assessment Division's Rolla campus;
- Division of Administrative Support's Accounting Program;

- Water Protection and Soil Conservation Division's Public Drinking Water Program; and
- Several major communications components in the Jefferson City central office.

These tasks have increased data transfer capacity between department entities, enabled the implementation of robust department-wide Internet connectivity, and "set the stage" for implementation of department-wide software systems. The greatly improved system responsiveness will facilitate enhanced departmental service.

As the department's communications infrastructure continues to evolve, utilization must be known to plan for growth and systems must be reliable. Therefore, during FY2002 the department continued to enhance network management capabilities by upgrading bandwidth-monitoring tools. These tools enable the department to monitor communications equipment and perform capacity monitoring and trend analysis of statewide data circuits. These new capabilities compliment previous efforts that included relational database (DB2) and Notes performance management tools; and remote software installation, configuration and auditing capabilities. During FY2002 the bandwidth-monitoring tools were used to identify and negotiate circuit capacity reductions that save the department $100,000 annually in leased circuit costs. Also, during FY2002 the department's network management "tools" detected and prevented approximately 50,000 e-mail virus incidents and "filtered" 1.8 million incidents of "spam" mail. Blocked virus incidents now average almost 130 per day and the number of filtered spam messages do not include many that are blocked from the Far East via IP addresses (which prohibits them from being counted in our totals). Filtering capabilities also continue to be used to prohibit access to inappropriate Internet sites. All network management capabilities support quick problem diagnosis, enables software license metering, extends fault-tolerant capabilities, and improves system reliability. Implementation of appropriate tools will continue to enhance the department's network management capabilities during the coming years.

Much has also been accomplished in the server consolidation category. The department's Web application server was upgraded to accommodate the increased utilization related to the implementation of the department's first web-enabled software application. Internet and network e-mail "gateway" servers were also upgraded to support the 61 percent increase of e-mail traffic that occurred during FY2001, as well as the additional 16 percent increase of e-mail traffic that occurred during FY2002. As anticipated, the amount of data that requires nightly backup increased by 33 percent during FY2002 and our automated disaster recovery system was able to process it due to the upgrade that occurred during FY2001. Finally, servers and database management tools were upgraded to support the department's evolving software applications environment. In addition to improving efficiency and availability, these enhancements improve the department's cyber security capabilities and enable the implementation of new department-wide software applications --- including e-government initiatives.

With the growth of PCs, networks and communications requirements throughout DNR, the department needs to attain the expertise required to integrate and maintain the

resultant infrastructure. Training is also required for specific products such as the network management software, the firewall and the e-mail system. Therefore, during FY2002, 63 departmental automation support personnel received formal technical training.

In addition to the training our technical support staff receives, it is also important that we train our employees to use the automation tools provided to them. Therefore, employees and supervisors work together to determine which courses are appropriate. During FY2002, over 433 department employees attended training for topics such as SAM II; Microsoft Word, Excel, Access and PowerPoint; and the FOCUS query tool. New vendor training contracts make it possible for employees to attend this training for 24 percent of what it previously cost them. Most training accomplished during FY2002 was held at the department's computer training facility, and training in all areas will continue to be a priority during the coming years.

Internet

The department's dynamic Web environment implemented to support public access needs continued to grow during FY2002. This environment has grown from approximately 50 Web pages of information in early 1996 to over 5100 pages currently. The public now accesses an average of over 690,000 department Web pages per month --- an increase from the less than 100,000 pages per month accessed during FY1999. Currently, the department furnishes databases, technical bulletins and fact sheets to the public via the Internet, and we continue to receive requests from the public to provide additional Internet accessible publications and news releases.

Ultimately, the department's Web environment will become an environmental information system that will support compliance assistance by facilitating the development of industry sector profiles that will highlight the industries and facilities that are subject to various cross-media requirements. Goals include providing Internet access to cross-linked environmental data, consolidating the reporting requirements of regulated facilities and supporting a facility-wide approach to permitting, enforcement, and inspections. The cross-linked information will strengthen decisions made within the department and impact the decisions of others. It will facilitate an improved understanding of resource issues and informed decision making. Instead of going to numerous programs and agencies for information concerning one entity, the public and staff will be able to access our Internet site and link multiple air, soil and water issues to that particular entity.

The Web provides a forum for exchange --- an opportunity to collaborate and communicate with the many stakeholders involved in natural, energy and cultural resource use, protection and preservation. Access to environmental data will act as a catalyst for citizens, facilities, and organizations. It will encourage them to consider the environmental impact of their decisions and actions, facilitate public debate on natural resource issues and encourage improvements in the data collected.

Software Systems

The Department of Natural Resources is facilitating the efficient and accurate collection of air pollution emission inventory data and fees by phasing in a system that will eventually take full advantage of Internet technology. This new system, the Missouri Emissions Inventory System (MoEIS), is the department's first effort in the area of electronic Government-to-Business transactions. Utilizing the newest version of MoEIS implemented during June 2002, the air-regulated community will be able to enter their annual Emissions Inventory Questionnaire (EIQ) via the Internet. The MoEIS will reduce the reporting burden of industry and the State of Missouri, and this "on-line" system will also allow the regulated community to work on emissions reporting information throughout the year, versus only during the first quarter of each year. This wed-enabled application will make the emissions inventory process more efficient and could lead to significant savings for large companies. Finally, the electronic submittal will also undoubtedly reduce entry errors and improve data integrity.

A significant enhancement to our Water Pollution Control Program's Water Quality Information System (WQIS) was also implemented during FY2002. This modification automated the water pollution permit fee collection process, eliminated duplicate data entry tasks, and facilitates the efficient annual fee collection of over four million dollars.

After working with the US EPA for over two years, during FY2002 the DNR implemented the EPA provided Safe Drinking Water Information System (SDWIS). The SDWIS is used to manage drinking water information and it will facilitate more complete data reporting to the EPA. Also, SDWIS has the ability to electronically capture sample results directly from labs; thus reducing the number of staff dedicated to data entry and the time used to correct data errors. The SDWIS will serve as the long-term primary data system for DNR's drinking water data management needs.

The Division of State Parks' Web site has been upgraded to include a "searchable" database of park amenities. Citizens may select one or more desired amenities such as region, major roads, trails, lodging, camping, and others. The results of their search are presented in alphabetical order with a picture of the State Park and Internet links to supporting information about the park. Using this new capability, citizens may compare pictures and amenities offered by various Missouri State Parks and select a State Park that offers the amenities they desire.

Planned Projects

All of the above listed infrastructure, Internet and software initiatives must, and will, continue to evolve. Specifically, e-government (i.e., Web) projects will ultimately simplify citizen, business and government interaction. The department's efforts will focus on reducing our customer's cost to file "hardcopy" returns and forms to meet regulatory requirements. The department will also realize improved processing time and cost savings through reduced labor previously required to enter data and process paper.

Hence, overall benefits will include more efficient department operations and improved customer satisfaction.

Geographic Information System

The department will create a centrally managed Geographic Information System capable of serving the data and mapping needs of the department and its constituents. It will enable the department to address spatial technology issues from a global perspective and will facilitate improvements in the way the department operates by providing the information the department collects in formats that will increase its availability, understanding and usability by stakeholders and decision-makers. The system will be the focal point for ongoing data system integration efforts, and will facilitate a better understanding and management of our natural and cultural resources by providing the department and the public with interactive mapping capabilities through the World Wide Web. The development and implementation of this system will be a key to turning the vast stores of departmental data into useful and easily comprehensible knowledge.

Communications

From a statewide perspective, communications needs resulting from data center consolidation efforts, the rapid growth of client-server applications and the deployment of multimedia services mandate the need for a communications-computer environment designed to integrate robust corporate data bases with an evolving, powerful PC-based multitasking environment. To address this need and to facilitate cost-effective and efficient operations, the DNR will continue to aggressively pursue partnerships with other state and federal agencies.

Software Projects

Many of the ISP identified projects are interdependent, and all current and future initiatives originate from them. All ISP software projects will adhere to the strategy of utilizing Advantage:Gen software development methodologies and WebSphere/JAVA tools for Web-enabled applications. Additionally, an integral part of the target communications-computer environment is a standard hardware and software environment. All emerging department standardization strategies will adhere to evolving statewide standards. The ISP projects personify the statewide strategy of focusing on access, optimization and innovation when providing services and making information readily available and easily accessible to the Missouri public. Resources are being shared and used to their maximum potential and solutions are being implemented in a manner that provides the greatest overall benefit.

Accumulated Demand

Maturation and enhancement of current system capabilities are imperative as the department focuses on quality and delivery of excellent, reliable service. The department has identified over 30 applications that should be web-enabled to support public access requests. A robust, evolving infrastructure must be implemented and maintained to meet

this demand. These public access needs must be supported and department employees must have reliable communications-computer systems to facilitate quick decisions and actions as they strive to fulfill the DNR mission.

General Department Profile (2002)

Department Name
Natural Resources

Street Address	City	Zip
205 Jefferson Street	*Jefferson City*	*65102*

Main Phone Number	Main Fax Number	Website URL
751 6525	*751 7749*	www.dnr.state.mo.us

Department Director
Mr. Steve Mahfood

Number of FTE (entire department)	Approximate number of citizens served
2053	*5,000,000*

Agency Mission (brief statement)
The Department of Natural Resources' mission is to improve the quality of life and economic well being of all Missourians by fostering the prudent use of our air, land, water, cultural, and energy resources.

Department CIO and IT Division Profile (2002)

Department Name			
Natural Resources			
Department CIO Name			
Chris Wilkerson			
Street Address		City	Zip
205 Jefferson Street		*Jefferson City*	*65102*
CIO Phone Number	CIO Fax Number	E-Mail Address	
751 6525	*751 7749*	*Nrwilkc@dnr.state.mo.us*	
CIO Membership in Professional Associations – Leadership Role Involvement (i.e., NASCIO – serve on architecture standards committee)			
IT Division Name		Website URL	
Division of Administrative Support, Management Information Services Program		Www.dnr.state.mo.us/das/mis	
Number IT FTE (located in central office)		Number IT FTE (located in field)	
35		*Approximately 40*	
Total $$ value of FY03 IT requests submitted to OA Budget and Planning		Total $$ value of FY03 IT requests funded	
0		*0*	
Security Officer Name		Phone No.	E-mail
None			
Privacy Officer Name		Phone No.	E-mail
None			
ITAB Alternate Name		Phone No.	E-mail
Mr. Jim Myers		*751 6525*	*nrmyerj@dnr.state.mo.us*
SDC Steering Committee Rep Name		Phone No.	E-mail
Chris Wilkerson		*751 6525*	*Nrwilkc@dnr.state.mo.us*

Department Technology Profile (2002)	
Department Name	
Natural Resources	
Main Processors (IBM 390 with MVS, UNIX AIX, UNIX Sun, etc.)	
Mainframe	
PC Servers	*Windows 2000*
Mid-range	
Networked	
Desktop (Windows XP, 3270, Linux, etc.)	
PC	*Windows 2000*
Dumb terminal	
Network Protocols (TCP/IP, SNA, IPX, etc.)	
TCP/IP	
Internet Connections (DSL, Cable, Dialup, etc.)	
Via the SDC	
Internet Service Provider (MORENET, AOL, etc.)	
MORENet	
Security Provisions (packages, anti-virus, filters)	
Network	*Server = McAfee, Firewall = Checkpoint*
Desktop	*McAfee*
Internet	*Securemail = Tummbleweed & WebSense*
Help Desk Packages (Magic, GWI)	
GWI	
Database Management Systems (DB2, Oracle, SQL, etc.)	
DB2 (primary), ORACLE & SQL required for specific "products"	
Development Tools (COBOL, CICS, Advantage:Gen, Websphere, .NET, etc.)	
Advantage:Gen & WebSphere	
E-Mail Packages (Exchange, Lotus Notes, etc.)	
Lotus Notes	
Encryption Packages (SSL, PGP, etc.)	
SSL	
Version Control Packages (Source Safe, Panvalet, InterSource, etc.)	

PVCS
Telecommunications (T1, Frame Relay, etc.)
T1, MAN, DS3
GIS (ArcView, MapInfo)
ArcView, ArcInfo, ArcSDE, ArcIMS

Missouri Public Defenders Office

Accomplishments

Electronic Expert-Witness Encumbrance System

Many Public Defender cases require the use of experts to evaluate defendants and testify in court about the results. Although this expense is necessary to comply with the Public Defender mission, financial oversight of the expenditures is a priority for the Public Defender administration. Previously, expense requests were hand written and mailed or faxed to the Public Defender administration for approval. Tracking of payments was difficult and time consuming. To streamline the process a new electronic expert witness expense request and encumbrance tracking system was developed. The system includes electronic request creation, multiple levels of electronic approval, and payment tracking. The results include a faster approval time --with paper and mailing expenses eliminated -- and a more efficient method of payment tracking. The system also includes an automatic email warning when expenditures exceed the approved expense amount. The electronic encumbrance system enables the Public Defender System to control costs while offering clients the best possible defense.

Upgrade of Hardware and Software

Information technology staff upgraded all operating systems and application platforms to the newest versions. This included about 600 PCs in forty locations throughout the state of Missouri. Servers were also remotely upgraded to the newest version of software. This upgrade allows for easier remote management of computers and increases the ability to develop applications that are portable and independent of client software.

Safeguarding Electronic Information – Dual Firewall Deployment

The Public Defender System has imposed a dual safeguard system to assist in the protection of the State of Missouri's computer systems from cyber threats and to reduce the propagation of computer viruses. This system gives the Public Defender a dual barrier of protection from the public Internet network and a single barrier between the Public Defender and other state agency networks. This configuration creates a double line of defense from unwanted Internet traffic and a single line of defense from unwanted

state traffic. It also protects other state agencies from any possible compromises in the internal Public Defender network.

Infrastructure Changes

Moving the physical location of offices creates an ongoing responsibility for the Information Technology staff. New locations must be wired for computers, telephones, and network access. Computer equipment must be moved and reconfigured for the new location. The State Public Defender enabling statute 600.040.1 requires that counties provide office space and utilities for the Public Defender. The location of the physical plant of local Public Defender offices depends upon the ability and/or willingness of local county governments to provide office space. Under the current statute, the Public Defender administration has little control over where offices are located and the number of times they must move. This system also significantly hinders IT control of the physical security of our equipment.

Discovery Library

Capital Division cases are very document intensive. Each case has tens of thousands of pages in documents, correspondence, and records that come from a variety of external sources. Manually keeping track of all the reports and the information contained in them is an overwhelming task. The discovery library was created so that as each report is read, this database can be used to record comments on sections of the report, down to the individual page, if desired. Information can be entered and tracked for such items as report source, author, potential witness names, statements, and physical location of the original paper report. The indexing capabilities allow for each database entry to be searched by a variety of keywords, assuring that information can easily be categorized and extracted.

Training and Help Desk

Information Technology Help Desk activities continue to be a significant benefit to employees. Knowledge of the specific configuration of the Public Defender computer system and the capabilities of the Public Defender applications is key in effectively delivering user assistance or pinpointing software and hardware failures. Customized training, specifically targeting newly developed applications and tools that Public Defender employees must utilize to efficiently fulfill their mission, is vital. A trusting relationship between Public Defender employees and the Information Technology Division is imperative to the successful deployment of new computer systems designed to enhance productivity. The Public Defender Help Desk staff and integrated training activities have proven to be effective instruments for successful implementation.

Employee Information Portal

Effectively communicating with 560 employees dispersed throughout the entire state is a difficult task. Sending an email to every employee would cause an unacceptable burden on the Public Defender computer network. Instead, an electronic bulletin board was deployed. It gives employees immediate access to current information and improves communication by ensuring that important information is disseminated expediently to all

employees, eliminating reliance on supervisors to share information down the chain of command. The portal also includes links to the Public Defender policy and procedures database and the training events calendar.

Planned Projects

Application Development

- Develop an easier-to-use and more efficient method of gathering statistics for management.
- Automate additional internal forms and procedures for increased efficiency and enhanced oversight.
- Integrate case management appointment documents with the current calendaring system for easier time management and support of mobile devices.
- Create a system-wide facilities database to combine dispersed and redundant information.

Infrastructure

- Upgrade LAN devices for increased speed and replace outdated hardware including workstations and servers.
- Evaluate WAN needs and research new wide area network configuration opportunities.
- Enhance off-site access for Director-level staff through the use of VPN technologies.
- Develop an automated system to remotely install software on workstations, enabling an immediate upgrade of critical software patches.
- Enhance policies and procedures for computer security and business continuity.

Accumulated Demand

With the pervasiveness of computing comes concern for support, training, web page design, application requests, and the implementation of new hardware and software. The Public Defender system has a backlog of requests for application development and enhancements, as well as expectations for connectivity and statewide access at 24x7 availability. Business requirements, process improvements, and electronic procedures that enhance existing systems will be addressed as personnel availability allows. Information Technology staff retention is the key to reducing accumulated demand and moving forward at a pace required by our client needs and the expectations of Missouri citizens.

General Department Profile (20 Defender 02)

Department Name
Missouri State Public Defender

Street Address	City	Zip
3402 Buttonwood Dr.	*Columbia*	*65201*

Main Phone Number	Main Fax Number	Website URL
573-882-9855		*www.PublicDefender.state.mo.us*

Department Director
J. Marty Robinson

Number of FTE (entire department)	Approximate number of citizens served
560	*80,000*

Agency Mission (brief statement)
The Mission of the Missouri State Public Defender System is to provide high quality, zealous advocacy for the people who are accused of crime in the State of Missouri. All Information Technology Projects are initiated in support of this mission and strive for enhanced quality and savings in all business processes.

Department CIO and IT Division Profile (2002)

Department Name		
Missouri State Public Defender – IT Division		
Department CIO Name		
Mary Willingham		
Street Address	City	Zip
3402 Buttonwood Dr.	*Columbia*	*65201*

CIO Phone Number	CIO Fax Number	E-Mail Address
573-882-9855		*mwilling@mspd.state.mo.us*

CIO Membership in Professional Associations – Leadership Role Involvement (i.e., NASCIO – serve on architecture standards committee)	
IT Division Name	Website URL
IT Division	

Number IT FTE (located in central office)	Number IT FTE (located in field)
9	*0*
Total $$ value of FY03 IT requests submitted to OA Budget and Planning	Total $$ value of FY03 IT requests funded
0	*0*

Security Officer Name	Phone No.	E-mail
na		
Privacy Officer Name	Phone No.	E-mail
na		
ITAB Alternate Name	Pho-9855e No.	E-mail
John Mullen/Mary Anne Flesch	*573-822-9855*	
SDC Steering Committee Rep Name	Phone No.	E-mail
na		

Department Technology Profile (2002)

Department Name	
Missouri State Public Defender	
Main Processors (IBM 390 with MVS, UNIX AIX, UNIX Sun, etc.)	
Mainframe	
PC Servers	*Microsoft NT*
Mid-range	
Networked	*yes*
Desktop (Windows XP, 3270, Linux, etc.)	
PC	*Microsoft Windows 2000*
Dumb terminal	*0*
Network Protocols (TCP/IP, SNA, IPX, etc.)	
Tcp/ip	
Internet Connections (DSL, Cable, Dialup, etc.)	
SDC	
Internet Service Provider (MORENET, AOL, etc.)	
MOREnet	
Security Provisions (packages, anti-virus, filters)	
Network	*NT*
Desktop	*Win2000*
Internet	*I.E.*
Help Desk Packages (Magic, GWI)	
Lotus Notes in house	
Database Management Systems (DB2, Oracle, SQL, etc.)	
Lotus Notes	
Development Tools (COBOL, CICS, Advantage:Gen, Websphere, .NET, etc.)	
Lotus Notes	
E-Mail Packages (Exchange, Lotus Notes, etc.)	
Lotus Notes	
Encryption Packages (SSL, PGP, etc.)	
na	
Version Control Packages (Source Safe, Panvalet, InterSource, etc.)	

na
Telecommunications (T1, Frame Relay, etc.)
T1
GIS (ArcView, MapInfo)
no

Department of Revenue

Accomplishments

WEBFile

In 2002, more than 8,000 taxpayers filed and paid their personal income taxes over the Internet. WEBFile, now in its third year, continues to grow in ease of use, functionality, and taxpayer acceptance.

Online Renewals

The Division of Motor Vehicle and Driver Licensing launched online renewal of license tags in February 2002. By late in the year, more than 9,700 motorists had taken advantage of the service. Customers truly appreciate the convenience and ease of use. The department expects further refinements and improvements will make more motorists eligible to renew plates online, rather than "in line."

Consolidated Registration (COREG)

The COREG system went online early in 2002. By late December, more than 2,150 new businesses had registered for their business taxes online – sales taxes and employer taxes, for example. The Department of Labor and Industrial Relations teamed with the department in developing the online system. In addition to the convenience of doing the registrations online, businesses also save time, effort, and confusion with a one-stop solution.

Sales Tax Rate Geographic Information System

Missouri taxpayers have approved a wide variety of sales taxes in their cities and counties over the years. Using GIS technology, this Internet application allows users to type in a street address and find that location's exact sales tax rate, with a breakout of the different tax types that make up the rate. Going live in February 2002, the site has recorded more than 10,500 hits as of December.

Motor Fuel Tax
Fuel tax in Missouri is collected from fuel distributors who do business here. During 2002, distributors were offered the opportunity to file and pay taxes over the Internet. The department expects more participation among distributors in the coming year.

Enhanced Sampling Program (ESP)
The purpose of this program is to increase the number of insured private passenger motor vehicles on Missouri roads and highways. Laws passed in 1999 and 2000 provided for suspension of uninsured motorists' plates and driver licenses, as well as the funding to enable the ESP. Insurance companies report their records monthly to the DOR, which uses the records as the basis of a sampling program to verify insurance status and suspend those who are uninsured. An Internet application allows insurance companies to transmit their records over the Web.

Planned Projects

More Interactivity
DOR is looking into providing more avenues for taxpayers to complete simple transactions over the Internet, thus providing greater access and efficiencies where possible. This trend mirrors expectations and developments in industry, where interactivity is becoming more important in Internet applications.

Notice of Lien (e-NOL)
The department is working toward an Internet application that will permit lien holders and vehicle dealers to file their notice-of-lien documentation electronically. Slated for production in July 2003, the system will streamline the NOL process.

Accumulated Demand

Intranet Information and Applications
As resources tighten, it becomes more important for the department to devote development time and effort to "outward-facing" applications. While this is excellent for many taxpayers, one unfortunate result is that internal, efficiency-enhancing applications may be deferred.

General Department Profile (2002)

Department Name		
Department of Revenue		
Street Address	City	Zip
301 West High Street	*Jefferson City*	*65101*

Main Phone Number	Main Fax Number	Website URL
573-751-4450	*573-751-7150*	*www.dor.state.mo.us*

Department Director	
Carol Russell Fischer	
Number of FTE (entire department)	Approximate number of citizens served
1,919	*5 million*

Agency Mission (brief statement)
The Department of Revenue is the central collection agency for all state revenues. The primary duties of the department are the collection of taxes, titling and registering motor vehicles, and licensing drivers throughout the state.

Department CIO and IT Division Profile (2002)

Department Name		
Department of Revenue		
Department CIO Name		
Jim Weber		
Street Address	City	Zip
301 West High Street	*Jefferson City*	*65101*

CIO Phone Number	CIO Fax Number	E-Mail Address
573-751-3100	*573-522-9795*	*Jim_Weber@mail.dor.state.mo.us*

CIO Membership in Professional Associations – Leadership Role Involvement (i.e., NASCIO – serve on architecture standards committee)
PMI

IT Division Name	Website URL
n/a	*www.dor.state.mo.us*

Number IT FTE (located in central office)	Number IT FTE (located in field)
126	*3*
Total $$ value of FY03 IT requests submitted to OA Budget and Planning	Total $$ value of FY03 IT requests funded
$0	*$0*

Security Officer Name	Phone No.	E-mail
Carl L. Medley II	*573-522-9819*	*Carl_Medley@mail.dor.state.mo.us*
Privacy Officer Name	Phone No.	E-mail
Carl L. Medley II	*573-522-9819*	*Carl_Medley@mail.dor.state.mo.us*
ITAB Alternate Name	Phone No.	E-mail
Kay Dinolfo	*573-751-4584*	*Kay_Dinolfo@mail.dor.state.mo.us*
SDC Steering Committee Rep Name	Phone No.	E-mail
Jim Weber	*573-751-3100*	*Jim_Weber@mail.dor.state.mo.us*

Department Technology Profile (2002)	
Department Name	
Department of Revenue	
Main Processors (IBM 390 with MVS, UNIX AIX, UNIX Sun, etc.)	
Mainframe	*z/OS (SDC)*
PC Servers	*Novell Netware 6.0, Windows NT, Windows 2000*
Mid-range	*AIX*
Networked	
Desktop (Windows XP, 3270, Linux, etc.)	
PC	*Windows 95/98/NT Workstation/2000*
Dumb terminal	*Hummingbird 3270 emulation*
Network Protocols (TCP/IP, SNA, IPX, etc.)	
TCP/IP, SNA, IPX, NetBios	
Internet Connections (DSL, Cable, Dialup, etc.)	
DSL; dialup via Shiva	
Internet Service Provider (MORENET, AOL, etc.)	
MOREnet	
Security Provisions (packages, anti-virus, filters)	
Network	*McAfee*
Desktop	*Network Associates McAfee VirusScan*
Internet	
Help Desk Packages (Magic, GWI)	
Magic	
Database Management Systems (DB2, Oracle, SQL, etc.)	
IDMS, DB2, Oracle, SQL, MS Access	
Development Tools (COBOL, CICS, Advantage:Gen, Websphere, .NET, etc.)	
WebSphere (Java), CICS, COBOL, .Net, ADSO, Visual Basic	
E-Mail Packages (Exchange, Lotus Notes, etc.)	
MS Exchange	
Encryption Packages (SSL, PGP, etc.)	
SSL (Internet)	
Version Control Packages (Source Safe, Panvalet, InterSource, etc.)	

Visual Source Save, Librarian (Mainframe)
Telecommunications (T1, Frame Relay, etc.)
Frame Relay
GIS (ArcView, MapInfo)
ArcView

Office of the Secretary of State

Accomplishments

Infrastructure

This project includes communications and server upgrades. The wiring upgrade is continuing. This includes eliminating all the CAT 3 wire and replacing it with CAT 5 or better wiring. With the increase in use of technology we have a need to expand our storage capacity. Additional software to assist in the management of the infrastructure has been licensed. This would include such products as Help Desk, System Managed Storage, etc. All of these efforts move us to preparing a quality solution with minimal impact to the ongoing production work at the Secretary of State.

Uniform Commercial Code

A new application was implemented in the third quarter of the 2001 calendar year. This provided the UCC unit with a technology solution that supported the Revised Article 9 Regulations. New information related to UCC filings was made available on the web as a result of this solution being placed in production. In addition, UCC filings can now be submitted via the Internet.

New Website

Secretary of State Blunt has placed a high priority on making information available on the Secretary of State's website. As a result, a new website design was implemented during the 2002 fiscal year. This design is intended to make it easier for users to find information. The design is based on functions performed by the Office of the Secretary of State rather than how the office is organized to perform those functions.

A number of collections are now available for viewing via the Internet including WWI Army and Navy cards. In addition, a number of research databases are available through the Internet including Civil War Provost Marshal index database.

Planned Projects

Infrastructure

Continue to upgrade the communications and server components. Continue the implementation of 2000 product line from Microsoft. This will require additional upgrades at the workstation level depending on the customer's business needs. Implementation of this project ensures that a stable and supported production environment is available to the customers of the Secretary of State. Magic Solutions Service Desk software, Microsoft Management Server and other management tools will be implemented allowing information technology staff to better monitor hardware, software and computer issues.

Organizational

Policies, procedures and standards are being developed to ensure a consistent framework within the Information Technology Division. This will allow for cross training of staff and assist in problem resolution as well as contribute to better customer service.

Website Development

Planned website development includes making St. Louis Probate Court records and Missouri Supreme Court records available on the Internet as well as an Archives' Finding Aids database. Another project will allow corporations to file annual reports online.

Accumulated Demand

A backlog exists in both the Application Services and Network Services areas of the Information Technology Division. There are currently 20 to 30 projects identified at this time that will need information technology resources to assist in the solution.

General Department Profile (2002)

Department Name
Missouri Office of the Secretary of State

Street Address	City	Zip
600 West Main Street	*Jefferson City*	*65101*

Main Phone Number	Main Fax Number	Website URL
(573) 751-4936	*(573) 751-2490*	*www.sos.state.mo.us*

Department Director
Matt Blunt

Number of FTE (entire department)	Approximate number of citizens served
290	

Agency Mission (brief statement)
The mission of the Missouri Secretary of State's Office is to support democracy by ensuring honest, fair, and reliable elections; providing essential information to enlighten citizens and enrich their lives; foster confidence in the integrity of Missouri business; promote appreciation of our common heritage; and carry out these functions in an efficient and effective manner, so as to reflect credit upon the office as a servant of Missouri citizens.

Department CIO and IT Division Profile (2002)

Department Name			
Missouri Office of the Secretary of State			
Department CIO Name			
Don Lloyd			
Street Address		City	Zip
600 West Main Street		*Jefferson City*	*65101*
CIO Phone Number	CIO Fax Number	E-Mail Address	
(573) 751-8471	*(573) 522-9947*	lloydd@sosmail.state.mo.us	
CIO Membership in Professional Associations – Leadership Role Involvement (i.e., NASCIO – serve on architecture standards committee)			
IT Division Name		Website URL	
Information Technology			
Number IT FTE (located in central office)		Number IT FTE (located in field)	
15		*0*	
Total $$ value of FY03 IT requests submitted to OA Budget and Planning		Total $$ value of FY03 IT requests funded	
$3,722,483		*$3,644,266*	
Security Officer Name		Phone No.	E-mail
Dustin Bieghler		*522-1278*	*bieghd@sosmail.state.mo.us*
Privacy Officer Name		Phone No.	E-mail
ITAB Alternate Name		Phone No.	E-mail
SDC Steering Committee Rep Name		Phone No.	E-mail

Department Technology Profile (2002)	
Department Name	
Missouri Office of the Secretary of State	
Main Processors (IBM 390 with MVS, UNIX AIX, UNIX Sun, etc.)	
Mainframe	
PC Servers	*IBM*
Mid-range	
Networked	
Desktop (Windows XP, 3270, Linux, etc.)	
PC	*Windows 2000*
Dumb terminal	
Network Protocols (TCP/IP, SNA, IPX, etc.)	
TCP/IP	
Internet Connections (DSL, Cable, Dialup, etc.)	
Internet Service Provider (MORENET, AOL, etc.)	
MORENet	
Security Provisions (packages, anti-virus, filters)	
Network	*McAfee Virus Scan*
Desktop	*McAfee Virus Scan*
Internet	*McAfee Virus Scan*
Help Desk Packages (Magic, GWI)	
Magic	
Database Management Systems (DB2, Oracle, SQL, etc.)	
MS SQL Server	
Development Tools (COBOL, CICS, Advantage:Gen, Websphere, .NET, etc.)	
Microsoft .NET	
E-Mail Packages (Exchange, Lotus Notes, etc.)	
Exchange	
Encryption Packages (SSL, PGP, etc.)	
Verisign	
Version Control Packages (Source Safe, Panvalet, InterSource, etc.)	

Source Safe
Telecommunications (T1, Frame Relay, etc.)
T1
GIS (ArcView, MapInfo)

Department of Social Services

Introduction
The mission of the Department of Social Services is to maintain or improve the quality of life for the people in the State of Missouri by providing the best possible services to the public, with respect, responsiveness and accountability, which will enable individuals and families to better fulfill their potential. The Information Services and Technology Division supports this mission by providing data systems and technology services essential for administration of social services programs.

Accomplishments

Children's Services Systems Electronic Report Generating System Development
The Department of Social Services is working with the Local Investment Commission in Jackson County to develop an electronic report generating system for Children's Services' systems. Ad hoc managerial reports will assist approximately 350 supervisors in caseload assignment and staff management; while case management reports will provide comprehensive service history for the 60,000 cases and increase the data resources available to approximately 1,500 social workers throughout the case management cycle. Management and case management reporting are federal requirements for the State Automated Child Welfare Information System. Three reports providing child abuse investigations, assessments and caseload analysis/status information were implemented December 31, 2002. Implementation for an additional 20 on-line reports is scheduled by July 2003.

Children's Services Systems Structured Decision-Making Tool Development
The Department of Social Services is working with the National Council on Crime and Delinquency, Children's Research Center on implementing a structured decision-making (SDM) tool for classification of calls received at the child abuse and neglect hotline to

meet State Automated Child Welfare Information System requirements. The SDM tool utilizes decision trees and produces standardize assessment of child abuse and neglect hotline calls while information provided by the caller is immediately entered into the web application. Implementation is scheduled for January 2003. This will increase productivity of the social workers and standardize the evaluation of the child abuse and neglect hotline calls.

Child Care Provider Screening Notification Implemented

The Family Assistance Management Information System (FAMIS) childcare component, implemented in April 2000, requires background screening of licensed providers of day care services. Background screening is completed at initial license and annually. Annual screening of licensed childcare providers did not provide the necessary immediate notification to children's services' staff in instances when child abuse and neglect calls are substantiated. In July 2002, an automated system was developed to notify the FAMIS-Child Care Management Unit on a daily basis of any substantiated child abuse and neglect findings on licensed day care providers. This new system allows for alerts to be sent to approximately 1,800 child welfare social services and management staff. This has a positive impact on the 40,000 clients served by this program.

Senate Bill 48 Background Screening Notification Implemented

Senate Bill 48 requires Department of Health and Senior Services' (DHSS) Family Care Safety Unit to immediately respond to callers for background screening which includes the Child Abuse and Neglect System. In April 2002, an automated data exchange was implemented with DHSS providing required information and eliminating a manual referral process that required up to four days to transfer information requests between departments.

Client Relationship Tracking Development

A new Client Relationship Tracking system is being developed to track the 60,000 client identification of parents, children and sibling relationships and respective 'termination of parental rights' in Children's Services' systems. Tentatively scheduled for implementation in spring 2003, this system will meet federal State Automated Child Welfare Information System requirement for case management and will assist staff in the retention of sibling relationships for the duration of Children's Services' assistance.

Children's Services Payment Reporting System Enhancement

The Children's Services Payment system was modified to eliminate production of non-reportable vendor payments for Internal Revenue Service (IRS) 1099 form reporting. Staff worked with IRS identifying reportable service payments eliminating production of 18,000 1099 forms for calendar year 2001. This reduced processing and postage cost, as well as staff time devoted to handling complaint calls from childcare providers.

Missouri Automated Child Support System (MACSS) Major Enhancements

MACSS was developed in compliance with the 1988 Family Support Act that mandated each state child support agency install a statewide, comprehensive management and information computer system. Representatives from the Department of Social Services, Office of State Courts Administrator, county circuit clerks and prosecuting attorneys worked together to design and develop MACSS to meet their requirements and the mandates of the federal legislation.

Implemented in September 1998, MACSS is a single statewide system that maintains one record of case data that is shared by all involved in the child support community and provides the following:

- On-line processing for the most up-to-date information.
- On-line financial processes including bank reconciliation, daily processing of receipts, distributions and disbursements.
- Automated support calculations, automated non-custodial parent location and automated enforcement.
- Centralized collection distribution of child support collections (implemented in December 1999).
- The Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA) of 1996 required states to implement major changes to retain federal certification. Changes to distribution accounting, federal case registry and federal data match were implemented December 28, 2000 to comply with PRWORA requirements.
- On September 28, 2001 all maintenance enhancements and new development for the MACSS system were turned over from IBM, the development contractor, to the Information Services and Technology Division.

In calendar year 2002, 376 problem reports were logged and resolved in the production system, 81 small enhancement requests and 8 database enhancements were implemented in production, and 32 ad hoc reports were generated for the customer.

Major enhancements implemented in calendar year 2002 included:

- Part two of the ability to reconcile Family Support Payment Center accounts,
- Ability to reconcile Division of Budget and Finance accounts,
- Automation of Social Security Administration disability benefits,
- National Medical Support Federal requirements, and
- Federal Support Guidelines part one and Medicaid Third Party Liability interface.

Child Support Automated Voice Response (AVR) Implemented

Custodial and non-custodial parents have access to child support payment and disbursement information through a telephone AVR system managed by the Information Services and Technology Division. An average of 468,000 calls is processed monthly, the maximum capacity for the AVR system. To respond to an increasing number of inquiries, a new web application was implemented to provide an alternative to the

telephone AVR system. Custodial and non-custodial parents, having access to the Internet, may now receive child support payment and disbursement information without making a telephone call to the AVR system. Implementation of the new web application avoided an estimated $200,000 in AVR hardware upgrades, plus additional on-going telephone and maintenance costs.

Electronic Benefits Transfer (EBT) – Preparation for New Contract

This is an ongoing project that provides clients of the Department of Social Services two methods to receive electronic benefits: direct deposit to bank accounts and electronic benefits transfer. Direct deposit uses the payees' personal bank accounts, thus avoiding the need for the state to establish and maintain an EBT account.

Missourians who qualify to receive food stamps and Temporary Aid to Needy Families (TANF) may also access their benefits via EBT using a Personal Identification Number (PIN) protected plastic magnetic stripe card. The EBT card can be used at most of Missouri's automated teller machines to withdraw TANF cash benefits and is accepted by grocers who participate in the federal food stamp program for debit purchases of approved food products.

Implemented statewide in May 1998, Missouri's current EBT system saves taxpayers approximately $1 million in operating expenses per year. An 800 number is available for financial institutions to access an automated voice response unit for enrolling TANF recipients in direct deposit accounts. TANF recipients may also use the Missouri Financial Institution Product Summary to select a no-cost or low-cost account that meets their needs. The summary, compiled in conjunction with the State Treasurer's Office, lists banks, credit unions, and savings and loans that offer no-cost or low-cost accounts.

Missouri's current EBT contract expires January 31, 2003. During 2002, proposals from vendors to provide EBT services to Missouri were evaluated and a new contract was awarded. Preparations for the new contract began with the following:

- Converting from 3270 screens to a PC application for accessing vendor account information.
- Reprogramming to accommodate a 10-digit departmental client number on files transmitted to and received from the vendor.
- Reprogramming EBT card process to eliminate client photo that will reduce card production cost.

Modifications to the existing system for the new EBT contract must be completed by February 2003.

Family Assistance Management Information System (FAMIS) Development and Implementation

FAMIS is a statewide, automated, integrated eligibility system for the Department of Social Services' programs including Child Care, Food Stamps, Temporary Assistance to Needy Families and Medicaid. Resource directory, provider management and childcare

components are operational in the FAMIS system. Provider management and childcare components were implemented statewide in June 1999 and April 2000 respectively. Pilot implementation of the food stamp components of FAMIS began in August 2002. Statewide implementation for the food stamp component is scheduled to be completed by August 2003. Mandatory federal Farm Bill changes for food stamps were implemented in October 2002.

FAMIS calculates benefits, produces notices to clients automatically and provides reports for case management and supervisory management for all levels of program administration. Providing automation and immediate access to data is essential for maintaining service delivery levels as eligibility determination continues to become more complex, particularly with the passage of the Welfare Reform law.

- FAMIS automates labor-intensive processes, thereby speeding delivery of services to clients.
- FAMIS standardizes benefit eligibility determination, thereby reducing error rates.
- FAMIS will allow staff time to be redirected toward additional welfare reform goals to help clients become self-sufficient.

Time Limit Tracking for Temporary Assistance

Adult recipients of temporary assistance grants are subject to a federally mandated time limit of 60 months for cash benefits if they do not meet hardship or exemption criteria. Missouri started imposing the time limit beginning in July 1997.

Prior to this year, caseworkers were tracking recipients' participation manually. Early in 2002, a 60-month tracking system was implemented. The system tracks benefit months remaining for the client and generates letters periodically advising them of the number of benefit months they have expended and available services that can help recipients become self-sufficient.

Approximately 155,000 temporary assistance recipients, including active and non-active participants, are being tracked. This system allows caseworkers located throughout the state to redirect an estimated 6,000 hours per month from tracking participation to other work areas.

Enhanced Automation of Medical Assistance Eligibility Implemented

The medical assistance program provides Medicaid coverage to elderly or disabled citizens. The program has several subprograms including spenddown, home community-based services, Program for All-Inclusive Care for the Elderly (PACE) and Ticket to Work.

This past year, the Medical Assistance Eligibility system was revised to implement eligibility for PACE and Ticket to Work. Edits were also added to the existing system to insure valid data is entered by caseworkers. This allows for improved data collection for statistics, funding, demography, and has improved case error rates substantially.

A premium collection system for Ticket to Work was developed as required by state and federal mandates. The impact of automating medical assistance eligibility is significant considering that there are approximately 196,000 active medical assistance cases.

Spenddown System Implemented

A new system was written to collect premiums for spenddown Medicaid coverage. There are approximately 18,000 spenddown cases. This system allows the client to either pay-in or to submit Medicaid bills on a monthly basis to verify spenddown requirements have been paid. Prior to implementation, there was no pay-in option. The pay-in method is completed by check or by automatic withdrawal from the client's account.

Temporary Assistance Cash-Medicaid Delinking Implemented

Prior to 2002, the determination for cash and medical benefits was made on a single case. The eligibility determination for the two benefit types has been conducted separately by the Division of Family Services' staff for several years, but the eligibility system did not make the distinction by case type. The eligibility system has been reprogrammed and the only benefit processed on a temporary assistance case is a cash grant. Temporary assistance eligibility guarantees Medicaid eligibility and the system insures that recipients also have a separate Medicaid case open. The chief advantage of this arrangement is that a recipient is far less likely to lose Medicaid coverage when the cash portion of the case is closed. Additionally, less effort is required by caseworkers when closing cash cases because they now only have to adjust the Medicaid case as opposed to the old system that required caseworkers to open a new case.

In 2002, three automated conversions were performed "delinking" the cash benefit from the medical benefit on approximately 46,000 cases with about 115,000 individuals. These conversions saved an estimated 46,000 hours of work in the aggregate for caseworkers.

Implementing Departmental Communications

In 2002, the Department of Social Services began implementation of a new communications system replacing several systems now in use. To streamline electronic communications, it was decided to implement a single, internally managed email system for the entire Department. Microsoft's Exchange was selected as the product of choice. In order to implement the new email system, another Microsoft component, Active Directory, will also be implemented. These two components will provide a communications package with a single directory used for email, resource security and application security. Active Directory and one single email system will enhance the Department's ability to share resources and communicate across division and project boundary lines. Implementation of Exchange and Active Directory began in July 2002. As of December 1, 2002, approximately 40% of the Department's locations and 20% of the Department's staff have been converted.

Desktop Systems Management Implementation

In 1999, the Department of Social Services (DSS) implemented Microsoft's Systems Management Server (SMS) to manage over 4,500 Family Assistance Management

Information System (FAMIS) workstations. This software provides three functions: inventory, software distributions, and remote control. Based on the success of SMS within the FAMIS environment, the decision was made to expand and standardize on SMS as the desktop management tool for the entire department. To date, SMS has been implemented throughout the Division of Family Services, Division of Child Support Enforcement, Information Services and Technology Division, Division of Budget and Finance, Division of General Services, and the Office of the Director. SMS has been used to distribute software for several projects, perform system updates, and in implementing the Microsoft Exchange email system with a limited number of staff and no travel expense. One limiting factor to our desktop management strategy is a lack of modern computer systems. Most existing workstations within DSS do not have wake-on-LAN technology, will not support a desktop management interface, and lack a standardized hardware and software configuration. Standards for both software and hardware have been established for department-wide use. As existing workstations are replaced, it will be possible to enhance and extend the management of the desktop. Naming standards of workstations and resources have been developed as well as a uniform process for creating and restoring standard images of workstations. This allows support staff in one section to be able to support users in another section crossing divisional and project boundaries. Use of SMS to collect inventory, distribute software and remote control of personal computers enables existing staff to improve staff support throughout DSS.

1931 Waiver Eligibility Income Limit Reprogrammed

The 1931 waiver increased the Eligibility Income Limit (EIL) in Medical Assistance for Families (MAF) cases and some Medicaid for Pregnant Women (MPW) cases to 100% of the federal poverty level. The eligibility system was reprogrammed to use the new standards and the eligibility on the existing MAF and MPW cases to use the new standard were converted. Letters to claimants were generated advising them of the change in the eligibility criteria and notices were generated to individuals on cases that were not receiving Medicaid advising them that they may now be eligible due to the increase the income standard. Prior to conversion, there were approximately 29,000 MAF cases. The increase in the EIL caused this number to grow to 189,000 cases. It is estimated that three automated conversions performed as a result of the 1931 waiver saved Division of Family Services' staff a minimum (aggregate) of 100,000 hours of labor.

Division of Family Services (DFS) Interface with Department of Labor and Industrial Relations, Division of Workforce Development (DWD)

An electronic referral process to DWD from DFS' Income Maintenance system was implemented. Data is exchanged daily between DWD and DFS by electronic tape exchange. DFS refers clients receiving temporary assistance to DWD when mandatory and voluntary training or participation employment related services are required. DWD returns all data necessary to write, distribute and track participation. This process has replaced the manual system and increased worker productivity.

Claims and Restitution System (CARS) Enhancements

In 2002, several enhancements were implemented to increase the revenue collected through tax intercepts and food stamp recoupment programs for outstanding claims in the CARS system. Enhancements were also implemented to ease the usability of the system for state and county office workers. These changes will help to collect more accurate and timely information as well as improve the certification process.

Energy Assistance Web Application Implemented

A new web interface was implemented to allow for exchange of eligibility information between the state and the fuel suppliers to reimburse fuel cost incurred by qualified Low Income Home Energy Assistance Program recipients. Of the 604 suppliers, 288 utilize the web, which decreases the number of paper responses keyed in by Division of Family Services' staff. These 288 suppliers are receiving their payments on the average of two weeks sooner.

Youth Services System Enhancements

The Division of Youth Services (DYS) administers programs for delinquent youths. The DYS application captures identifying information on the youth as related to the court commitment, captures all placements of the youth while with the division, captures school schedules and attendance, and captures after care services. The following enhancements were accomplished:

- Enhancements for the Needs Assessment Project were implemented. Needs Assessment assists DYS staff in identifying program services, i.e. education, drug counseling, and family counseling.
- Special rehabilitation options reports were created for DYS central office to accurately track services covered by Title XIX Federal dollars.
- The DYS application was expanded to retain records of youths to the age of 25 to comply with new statutory requirements.
- Second and third handicap conditions were blocked to be compliant with the Department of Elementary and Secondary Education (DESE).
- Educational test scores/course changes were implemented to meet DESE requirements.
- Day Treatment facility youth movements were redefined to improve tracking the youth while in DYS.

Common Area Interface/Language Proficiency

The Common Area application identifies clients participating in Department of Social Services' program areas by an assigned unique Departmental Client Number (DCN). The DCN allows for tracking of a client between the various programs using a single identifying number. During 2002, DCN enhancements were made in the following areas:

- A DCN file exchange with the Office of State Courts Administrator for Missouri Juvenile Justice Information System was implemented.
- Expanded the DCN system to capture language proficiency for clients in compliance with a presidential executive order.

Personnel Application Improvements

The Personnel application was developed to provide around-the-clock access to Department of Social Services' worker information for legacy applications, hotlines and help desks. Information Services and Technology Division staff support the Human Resource Center (HRC) by providing reports from the Personnel application and from the Office of Administration's SAM-II HR application. The following enhancements were accomplished:

- Employee address enhancements, due to changes in SAMII HR, were implemented to provide confidentiality of a worker's home address.
- Sixteen new reports were created for HRC that were not provided by SAMII HR. This increased the productivity of HRC staff.
- Implemented additional records and elements to existing records on the Personnel application database. This was needed to assist in the creation of future reports.

Commitment Accounting – Email Expense Reimbursement Implemented

The Commitment Accounting application provides an interface to SAM-II Financial system. It aids in entering payments and recoupments into the SAM-II Financial system. Changes were implemented to notify employees via email when expense checks are direct deposited. An email notice is sent to staff when SAM-II Financial system processes an expense account that is direct deposited to a bank account. This enhancement encourages staff to use the SAM-II direct deposit option thus eliminating paper check processing, handling and postage costs.

Division of Family Services, Income Maintenance Time Study Implemented

The Department of Social Services (DSS) replaced the paper-based and labor-intensive time study entry and reporting process with a new on-line time study application. This new web application (affecting approximately 2,300 caseworkers) eliminates the need to mail, complete and return paper communication to and from county caseworkers, thus saving time, paper, printer and distribution resources. The application collects the input data into a central database, eliminating data entry and a lengthy process for compiling reports. Data collected is used to determine federal fund participation for various programs administered by DSS. This new system has greatly reduced staff time needed to record and calculate employee time.

Manuals Available Via Intranet Implemented

Replacement of several paper-based manuals with new on-line manuals available from the Department of Social Services' (DSS) Intranet was completed. The on-line manuals, available to all DSS employees, can easily be searched and eliminate the need to print and distribute paper manuals saving paper, printer and distribution resources. New manuals include the DSS Administrative Manual, Employee Handbook, and the Information Services and Technology Division's Disaster Recovery Plan. This increases staff productivity by having the most up-to-date manuals available in one location.

Prince Hall Family Support Center (PHFSC) Tracking/Referral System Implemented

PHFSC was established and operates under the authority of the Department of Social Services. The facility was established to serve as a family resource center following the family support programs concept. PHFSC is developed on a model, incorporating five basic family support practices: community-based programs and services, family focused programs, family empowering programs, family skill building, and culturally responsive programs and services. The facility consists of twenty Missouri state and private not-for-profit agencies joining in the effort to provide services in a comprehensive, integrated and holistic manner.

A client information tracking and referral system was developed and is available for referrals and scheduling of appointments with various on-site agencies. Three Department of Social Services' agencies (General Services, Family Services-Children's Services, and Family Services-Income Maintenance) are currently using the client information tracking system.

Equipment and Network Upgrades Installed

Information Services and Technology Division Technical Support staff maintain a statewide telecommunications network and install and upgrade computer equipment in county office facilities throughout the state. In 2002, the following activities were completed:

- Installed 45 personal computers for SAM II.
- Installed 430 personal computers for the Family and Children's Electronic System.
- Installed 288 personal computers and 446 printers for Family Management Information System.
- Installed 693 personal computers and 134 printers for Division of Child Support Enforcement.
- Converted 84 sites from token-ring to Ethernet that included 3,328 personal computers and 648 printers.
- Installed 9 routers and 68 switches as part of the token-ring to Ethernet conversion.
- Logged over 136,000 travel miles servicing our office sites in calendar year 2002.

Database Administration

Implemented formal procedures to monitor DB2 performance and converted to "Shark" DASD to cut DB2 response time across the board. Began conversion to new Unload Utility available in current version of DB2 (Version 7). Utility is much faster than the utility used previously and will cut maintenance times significantly.

To reduce CPU processing cost:

- Began changing Missouri Automated Child Support System databases to "STOGROUP" defined databases.

- Began working with application teams to review use of development, test, and training environments.
- Continued conversion from IDMS compression to PRESSPACK.
- Analyzed STROBE outputs, conducted code reviews, and worked with application teams to tune databases.

Security Administration

Security activities required for the transfer of the Division of Aging to the Department of Health and Senior Services were completed.

Security activities required for Division of Children's Services to split from the Division from Family Services were identified.

The first phase of the automated security "Access Request" process was implemented by making the forms available on the Department of Social Services' Intranet. The new form enables security authorizations, changes and deletions to be processed more quickly and with fewer errors. Complete implementation will eliminate paper forms and further reduce processing time.

Planned Projects

Children's Services WebFocus Reports

During calendar year 2002, the Information Services and Technology Division has worked with agency staff to provide mentoring and assistance in developing statewide WebFocus reports for Family Services, Children's Services staff that meet federal State Automated Child Welfare Information System requirements. These efforts will continue throughout calendar year 2003.

Children's Services Adoption Subsidy Program

Legislative Oversight Review of Adoption Subsidy program requires development of system to handle child specific contracts, sibling relationships and development of automated payment matrix to facility provider payments.

Division of Family Services, Children's Services Time Study

An additional on-line time study reporting system is planned for 2003 that will replace the paper based labor-intensive process currently being used by Children's Services staff.

Distance Learning Initiative

The Distance Learning initiative consists of a partnership with Missouri National Guard to provide facilities and telecommunications links for Department of Social Services (DSS) training efforts. Though the original discussion concerned only eLearning, the scope has been expanded to include the use of Guard facilities and network on an interim basis for DSS business continuity. Wireless technology capability and cost are being assessed for use in distance learning and disaster site recovery in the event of a wide area disaster or if a county office facility is unavailable. A formal agreement addressing cost

and DSS partnership obligations has been drafted and is being negotiated. In 2003, wireless training will be used for program training in locations throughout the state to reduce travel cost.

Department of Social Services (DSS) Public Website Redesign

The DSS website will be redesigned to include more useful information, making it easier to find helpful information. Style sheets will incorporate formatting elements and ADA mandated changes. The public accesses an average of over 259,000 department web pages per month.

Workforce Consolidation Plan

With welfare reform in Missouri, a better system that brings a range of employment opportunities and social supports together in a coordinated, seamless fashion is planned for 2003. Trends in service delivery, a growing interest in collaboration, improving employment and training outcomes for Temporary Assistance for Needy Families (TANF) and Parents' Fair Share (PFS) program recipients and limited resources require the consolidation of workforce development and supportive activities.

The Department of Economic Development (DED), Division of Workforce Development (DWD) provides direct services to Missouri's economically disadvantaged, unemployed and underemployed adult and youth citizens in the form of employment and training opportunities, designed to increase individual earned income. The Department of Social Services (DSS) provides cash assistance to Missourians. To meet federal requirements, some DSS clients are required to work and/or participate in work related activities. DSS provides TANF recipients with resources for direct client services, job readiness, educational activities and community work experience programs. By consolidating these targeted resources within DED, DWD can efficiently utilize resources to improve employment outcomes for greater numbers of TANF and PFS recipients. An automated application to allow for online exchange of data between DSS and DED is being developed.

Electronic Benefits Transfer (EBT)/Direct Deposit

Missouri's new EBT contract becomes effective February 1, 2003. Modifications will be completed in January to the state's EBT system to comply with the new contract.

Family Assistance Management Information System (FAMIS)

The food stamp component of FAMIS will be rolled out in a phased approach with statewide completion scheduled for August 2003. Analysis for the next phase of FAMIS, Temporary Assistance, will continue with statewide implementation scheduled by the end of 2003. Medicaid will be the final component of FAMIS and is currently scheduled for statewide implementation in September 2005.

Presumptive Eligibility for Kids

This system will offer instant Medicaid coverage for children under the age of 19 that are in immediate need of medical care. The current Income Maintenance eligibility system

will be programmed to manage the eligibility determination and implementation of coverage.

Missouri Automated Child Support System (MACSS)

In the calendar year 2003, multiple user-identified change requests, approved by the Child Support Enforcement executive staff, will be incorporated into MACSS as funding permits. One major effort will require replacement of IBM OfficeVision software used to produce MACSS forms. OfficeVision is no longer being improved by IBM and it is expected that product support will be withdrawn in the near future. Integration of replacement software into MACSS must be done to provide more functionality and to avoid system problems should IBM withdraw software maintenance support.

Division of Family Services (DFS) Interface with Department of Labor and Industrial Relations

DFS Income Maintenance and Food Stamps systems will require reinstatement of the daily and quarterly wage data exchange with the Division of Employment Security. Earned and unearned wage information will need to be electronically transferred and reported to the state and county workers to aid in the eligibility process for DFS clients.

State Online Query

Currently, the Division of Family Services' Income Maintenance, Food Stamps and Medicaid programs access the Social Security Administration (SSA) information with an overnight batch process. In the year 2003, the Department of Social Services will implement online real time access to the SSA Enumeration Verification Service, Title II and Title XVI benefit data. This information is used to verify the names and social security numbers of Missouri recipients receiving assistance. This interface also determines federally funded health and income eligibility benefit amounts administered by the state through the Income Maintenance program.

Claims and Restitution System (CARS)

Quarterly certification of claims for benefit repayment erroneously received by clients will be initiated instead of annual certification. Enhancements will need to be in place for the tracking of the identification numbers on all intercepts sent to the Department of Social Services by USDA Food and Nutrition Services.

Cost Allocation System

Information Services' staff will incorporate the loading of State Data Center (SDC) billing data into the Cost Allocation system and phase out some of the entities loading information into the Cost Allocation database.

Tracking Purchase Order/Warrant Request Data

A web-enabled application to collect and report pending purchase order and warrant requests is planned for 2003.

Child Support Enforcement AVR Modification

A rewrite of the Automated Voice Response (AVR) System for Child Support Enforcement Payment Information is planned for 2003. Modifications will provide clearer and more concise access to child support payment and disbursement information. The Missouri Automated Child Support System AVR application responds to 468,000 customer inquiries each month.

Intranet Content Publishing

The Department of Social Services (DSS) will continue to maintain as well as add new content to the DSS Intranet to provide more information to DSS employees. A significant project, the Child Welfare Manual, will be available to Children's Services staff in 2003.

Prince Hall Family Support Center (PHFSC)

In 2003, the client tracking/referral system will be enhanced to expand use to other state agencies and not-for-profit service providers that offer services at PHFSC.

Health Insurance Portability and Accountability Act Of 1996

The Health Insurance Portability and Accountability Act of 1996 provides for standardization of electronic patient health, administrative and financial data and requires implementation of privacy and security procedures for health related data. This legislation requires use of a standardized transaction codes to identify medical procedures with stringent privacy and security requirements for individually identifiable health and financial information. In 2003, system modifications to identify Medicaid reimbursable expenses using standardized codes and privacy awareness and training will be initiated.

Equipment Installations/Network Upgrades

The Department of Social Services (DSS) provides network connectivity to 242 locations throughout the State of Missouri. As of December 1, 2002, 25 sites remain to be converted from token-ring to Ethernet technology. Most of these are large metropolitan area locations and reflect approximately 3,800 personal computers and 800 printers. The Information Services and Technology Division (ISTD) will complete this conversion by the end of FY03. ISTD will implement procedures to do its own maintenance/replacement on more than 4,500 personal computers when the manufacturer's warranty expires. Depending on availability of funds, a certain number of new personal computers and printers will be purchased to replace outdated ones. Also, pending funding approval, wide area network bandwidth will be upgraded and sites not already on frame relay will be moved to the DSS frame relay network. ISTD will also work with the State Data Center to move many of its data circuits to phone company facilities associated with the recently awarded Network Transport Services contract. ISTD, with the assistance of Sprint, will also create an alternate network concentration point at another Jefferson City site for network disaster recovery purposes.

Database Administration
Conversion to DB2 Version 7 Unload Utility, definitions for Missouri Automated Child Support System databases to "STOGROUP", conversion to PRESSPACK, and continue database tuning to reduce processing cost will be completed.

Security Administration
Implementation of the automated security "Access Request" process will continue. Security awareness activities throughout the Department of Social Services will continue to be expanded and enhanced. Work will continue with the IT Architecture committee on security domain. Implementation of policies and procedures required for Health Insurance Portability and Accountability Act compliance will be completed. Implementation of a formal "Incident Response" process will also be completed.

Accumulated Demand

Internet/Intranet Processes
Demand exists to web-enable more of the Department of Social Services' processes either internally (Intranet) or accessible to the public (Internet). Data communication circuits connecting almost all of the 242 county facilities are small 56Kb circuits equivalent to most private home Internet connections. To transmit increased data traffic generated using Intranet and Internet web applications, network upgrades estimated at approximately $1,000,000 per year will be required to provide high-speed data communications to county office locations.

Family and Children's Electronic System
Development of an integrated child welfare system, compliant with federal guidelines for State Automated Child Welfare Information Systems (SACWIS), must continue. SACWIS requirements are composed of four functional areas: Intake Management, Eligibility, Case Management, and Resource Management. By July 2003, staff will complete a web-based on-line Structured Decision Making (SDM) system for the child abuse and neglect hotline calls for Intake Management and comprehensive child history and management reports for Case Management. In fiscal year 2004, if funding is available, an automated case eligibility re-determination component will be developed. Resource Management, comprised of resource directory enhancements, facilities identification, contact support, and foster home availability tracking will be the final SACWIS component developed.

Infrastructure Technology Upgrade
The Information Services and Technology Division provides network connectivity and computer installation services to 9,574 Department of Social Services' staff. Over 14,000 PCs, printers, terminals and servers are installed in 242 locations throughout the state. Eighty-eight percent of network attached PCs and 95 percent of network-attached printers are more than 3 years old. Repair part availability and increased maintenance

costs will become issues in the near future. Funding requests to replace computer equipment on a 3-year rotation cycle have not been successful.

Missouri Automated Child Support System (MACSS)

As of December 2002, a total of 137 change requests have been identified by the program agency for possible enhancement/revision of MACSS. New federal regulations proposed, if adopted, will further change child support payment distributions and system accounting structure.

Family Assistance Management Information System (FAMIS)

Information Services and Technology Division assumed responsibility for maintaining the FAMIS Resource Directory and Child Care system in November 2001. With implementation of the food stamp component in 2003, state staff and contract staff are working together on production support. When the state assumes complete responsibility for FAMIS maintenance, additional staff will be necessary to support the system.

The next phase of FAMIS will be the Temporary Assistance for Needy Families (TANF) program. Some analysis has been completed on this phase and will be continued during 2003, with plans to pilot by the end of 2003. The final phase for Medicaid eligibility will be developed following TANF implementation and is scheduled for statewide implementation by September 2005.

Electronic Benefits Transfer (EBT)/Direct Deposit

Modifications to the existing system for the new EBT contract must be completed by February 2003.

1931 Waiver

As a result of delinking 1931 Waiver and Medical Assistance system revisions, it will be necessary to revamp two of the annual automated adjustments.

Prince Hall Family Support Center (PHFSC)

Maintaining the client tracking/referral system and the kiosk system and implementing an equipment replacement program are essential to PHFSC service concept. Provider agencies at PHFSC will require system enhancements as program services offered are updated or changed.

General Department Profile (2002)

Department Name
Department of Social Services

Street Address	City	Zip
221 West High Street	*Jefferson City*	*65102*

Main Phone Number	Main Fax Number	Website URL
573-751-4815	*573-751-3202*	www.dss.state.mo.us

Department Director
Dana Katherine Martin

Number of FTE (entire department)	Approximate number of citizens served
9,500	*2,500,000*

Agency Mission (brief statement)
Coordinate programs to provide public assistance to children and their parents, access to health care, child support enforcement assistance, and specialized assistance to troubled youth.

Department CIO and IT Division Profile (2002)

Department Name			
Department of Social Services			
Department CIO Name			
Dennis Bax			
Street Address		City	
313 West McCarty Street		*Jefferson City*	*65101*
CIO Phone Number	CIO Fax Number	E-Mail Address	
573-751-4435	*573-751-0412*	DBax@mail.dss.state.mo.us	
CIO Membership in Professional Associations – Leadership Role Involvement			
IT Division Name		Website URL	
Information Services and Technology Division		*www.dss.state.mo.us/istd.htm*	
Number IT FTE (located in central office)		Number IT FTE (located in field)	
185.91		*0*	
Total $$ value of FY03 IT requests submitted to OA Budget and Planning		Total $$ value of FY03 IT requests funded	
$ 8,882,160		*$ 0*	
Security Officer Name		Phone No.	E-mail
Dan Green		*573-751-4198*	DGreen@mail.dss.state.mo.us
Privacy Officer Name			E-mail
Harry Williams		*573-751-3229*	will0kh@mail.state.mo.us
		Phone No.	E-mail
Steven E. Adams		*573-526-4516*	SAdams@mail.dss.state.mo.us
SDC Steering Committee Rep Name		Phone No.	E-mail
Dennis Bax		*573-751-4435*	Dbax@mail.dss.state.mous

Department Technology Profile (2002)	
Department Name	
Department of Social Services	
Mainframe	*IBM2064-110 with OS/390, UNIX System Services*
PC Servers	*IBM, Compaq, Dell, Perpetual Systems*
Mid-range	*AS-400*
Networked	*All of the above*
Desktop (Windows XP, 3270, Linux, etc.)	
	Windows 98, 2000, and NT
	3270
Network Protocols (TCP/IP, SNA, IPX, etc.)	
TCP/IP, SNA	
Internet Connections (DSL, Cable, Dialup, etc.)	
Dedicated via SDC and MOREnet, dial-up via MOREnet	
Internet Service Provider (MORENET, AOL, etc.)	
MOREnet	
Security Provisions (packages, anti-virus, filters)	
Network	*Pix 515R Firewall*
Desktop	*Norton Antivirus*
Internet	*Provided and managed by State Data Center*
Help Desk Packages (Magic, GWI)	
GWI	
Database Management Systems (DB2, Oracle, SQL, etc.)	
IDMS, DB2	
Development Tools (COBOL, CICS, Advantage:Gen, Websphere, .NET, etc.)	
COBOL, CICS, Advantage:Gen	
Exchange, Lotus Notes, OfficeVision	
Encryption Packages (SSL, PGP, etc.)	
Available via network hardware – DES, 3DES, SSH, SSL, MPPE	
Version Control Packages (Source Safe, Panvalet, InterSource, etc.)	

Telecommunications (T1, Frame Relay, etc.)
T1, Fractional T1, Frame Relay, ISDN, Analog
GIS (ArcView, MapInfo)

Office of the State Courts Administrator

Accomplishments

The Statewide Judicial Information Network

The statewide network linking all Missouri courts remains a successful component of the Missouri Court Automation Program. Due to its success, there has been an increasing traffic load on the network, causing the Office of State Courts Administrator to begin replacing many of the phone lines with fiber connections to efficiently support increased information loads. Although an increased cost, these new connections continue to (1) save the citizens of Missouri money through shared use with the Missouri Department of Social Services and the Missouri State Highway Patrol, and (2) improve service by providing increased capacity and speed with significantly reduced downtime. This partnership is yet another successful component of the SJIN.

Infrastructure

While the initial infrastructure for Missouri courts was completed in 2001, this year proved successful in our ability to maintain the infrastructure. One of the top ways we are maintaining the state is by providing courts with a more current and secure Operating System upgrade. This year, we began successfully taking all courts from a Windows 95 environment to a Windows 2000 environment. Although there are still courts remaining in the upgrade process, staff have been able to successfully upgrade courts due in part to the fact that a standard infrastructure was in place to begin with.

Lotus Notes Project

All of Missouri's judges and clerks now have access to the Lotus Notes e-mail and database software. This business tool allows courts to communicate easily, share business practices and resources, and participate in secure, peer discussion groups. The software also allows the general public and other state agencies to easily interact with court personnel. This year OSCA completed an upgrade of all servers to Lotus Notes R5. Training staff and information technology personnel are now working to train all court staff and upgrade all court staff workstations. The ability to design a web-based training

program for users was a major success and will provide cost savings in personnel and travel as this upgrade is completed throughout the remainder of the Judiciary.

Case Management System

In partnership, Missouri court staff and Office of State Courts Administrator staff continued rollout of the statewide case management system within the confines of a reduced budget. This calendar year, seven courts implemented the software. With over half of the state now able to use the software and reap the benefits of the system, there are many courts still in need of the software. Depending on the funding available, OSCA is hopeful that they will be able to continue rollout of this system. They are already working with the Jackson County Criminal and Traffic court divisions to plan implementation in the coming year.

Juvenile Enhancements

The juvenile enhancements to the statewide case management system were successfully piloted this year and have begun to rollout to juvenile offices across the state. Prior to a juvenile office receiving the enhancements, the courts within the Judicial Circuit that the Juvenile office serves must already be using the statewide case management system. Thus, the training and implementation schedules have been planned according to which adult courts are currently using the statewide software.

Jury Management System

This was a successful year for installation of a jury management system to assist Missouri courts with jury processing procedures. The majority of implementation was completed in 2002. The few remaining courts will receive the software in the first few months of 2003.

Case.Net

Lawyers, litigants and Missouri citizens have been most excited about the benefits of the OSCA developed software, Case.Net. Case.Net allows courts using the statewide case management system to display their public case information through the Judiciary homepage. The general public can search for public case information using name, case number or filing date without making a trip to the courthouse or having to wait for a clerk to be able to assist them by looking up or printing a file. System users can even perform a statewide search for information about a person. This year, an additional success was the upgrade of Case.Net to allow Missouri attorneys to follow cases they are involved in online by typing in their Missouri Bar Number. Additionally, all system users are able to view the court calendars of judges and commissioners. A branch of the system was also developed this year for use by the juvenile officers just beginning to use the statewide case management system. Juvenile officers are able to search for information about the children they serve by entering an additional layer of security and accessing "Secure Case.Net" to view their client's information. Sixty-six courts and the statewide Fine Collection Center now post their public information on this system.

Electronic Data Transfer

This year OSCA-IT staff expanded the ability to electronically transfer data. They worked with the Highway Patrol to electronically receive the traffic tickets coming in to the statewide Fine Collection Center. This electronic transfer eliminates the double data entry time for Highway Patrol and FCC clerks, and due to last year's successful implementation of FCC case transfer to courts using the statewide case management system, it eliminates the need in many cases for what would have been triple data entry.

Additionally, once a court receives the Phase I upgrade of the statewide case management system, they will now have the ability to electronically transfer Adult Protection Orders (APO) directly to the Missouri Uniform Law Enforcement System (MULES), available to all Missouri Law Officers. These court orders are issued as a protection for victims of domestic violence, so in addition to the benefits of reduced data entry and increased efficiency, there is also a large degree of public safety involved in this immediate transfer.

Planned Projects

- With continued funding, rollout of the statewide **case management system** will continue. Over half of the Missouri court caseload is now handled by this system.
- The **jury management system** will complete rollout during the next calendar year. Continued rollout of the **Juvenile Enhancements** to the case management system is planned if grant and state funding remain available.
- As a result of user evaluation sessions last year, there is a **planned upgrade** of the JIS case management system. This upgrade will occur in two phases. First, the new software will be placed in courts currently using the system. This was started in 2001 and will continue into next year. Phase two will incorporate changes in areas identified by users as the most problematic for Missouri Courts. Depending on funding, this upgrade will occur while rollout of the both the system and juvenile enhancements continue.
- The remainder of the Judiciary Notes users will be trained and receive the **Lotus Notes R5** upgrade.
- The upgrade of the Judiciary to the **Windows 2000** Operating System will continue throughout the next year.
- An **Electronic Filing** system is a top business need for both courts and their clientele. Prior to implementing an electronic filing solution, however, the technology must be able to support an intake of information without a need for double entry on the part of clerks, and without breaching any security firewalls for those attempting to submit information. Emerging XML standards, which we are watching closely, may provide the needed technology foundation to support electronic filing. However, with tight budgets continuing, this project will likely be moved into out years.

- **Document management** is a highly complex subject that incorporates traditional retention and disposal of records, electronic and photographic imaging of records, the flow of documents through business processes, and the creation storage, retrieval, access and security of documents. With funding, OSCA-IT will establish the scope and business requirements for a document management system to support the core business activities of courts and identify "best practices" to manage the massive records burden currently facing courts. Tight budgets will likely postpone progress on this project.

Accumulated Demand

The Missouri Court Automation Program has significantly changed the way that Missouri Courts do business. The family of automated systems must continue to be supported now that they have become a part of the business culture of the courts and have set an expectation of what services courts will be able to provide to Missouri citizens and other state agencies in the future.

Shrinking budgets and lacking resources present a series of unique challenges for the Missouri Court Automation Program. There is a need to balance a requirement for specialized staff, an increasing demand for new technology solutions and timely assistance with IT support. We are also faced with retaining qualified IT staff in the government sector while resources are slim.

Just less than half of the state courts are still waiting to receive the statewide case management system. In addition, courts that are currently using JIS will be ready to complete phase two of the upgrade process, making the system more useful and compatible with Missouri court processes. Juvenile courts are now ready to receive the enhancements to the case management system that allow them to automate their processes and help them better manage increasing caseloads. The program will soon be at a stage where both electronic filing and document management will become increasingly critical to courts.

Information technology solutions have helped the Judiciary improve service, increase its ability to share public information and improve its statistical reporting tools. However, technology must continue to be supported in order to continue its effectiveness.

Agency Profile

As a member of the judicial branch of government, a department profile was unavailable from the Office of the State Courts Administrator.

Department of Transportation

Overview

Information Systems in Constrained Budget Years

In a time where state budgets are exceptionally tight and state revenues continue to be below par, agency Information Systems units play a dual role with respect to serving their department's needs. As agencies look for ways to save internal operating costs, one of the most frequent recommendations made by business planners to reduce costs center around automating part or all of a particular business process. Recognizing that automation still can and does save time, improve efficiency, and sometimes save actual budget dollars, Information Systems units must be up to the challenge of delivering on these expectations.

The second role for Information Systems units in constrained fiscal environments is to tighten their own operating budgets and continually seek ways to deliver more service with fewer resources. Accomplishing this task requires that IS examines its own business processes thoroughly and begins to track its performance in key areas. It does not necessarily mean that IS must automate all of its own internal processes, however. As with the business units, automation is not necessarily the best practice for every internal process. A well-designed and managed manual process will beat out a carelessly administered automated process practically every time. What it does mean is that IS shops must find the weak, inefficient areas in its own operations and service solutions that prevent it from squeezing out a few more ounces of value for the same or fewer dollars.

For MoDOT Information Systems, calendar year 2002 was a year of the dual role. As it worked on projects to help improve the department's internal operations, it also examined its own processes and technology, looking for ways to reduce costs. One of the larger cost-savings efforts included consolidating servers, communications, and other processing functions from the ten district offices into the Jefferson City headquarters location. Another was the examination of dial-up costs incurred by the field locations, and developing alternative solutions for the more costly locations. Yet another involved purchasing a database productivity tool called ETL (Extract, Transfer and Load) so that

IS staff could manage data repositories, eliminating the need to hire contract consultants to do the work.

The following accomplishments listed below demonstrate MoDOT's Information Systems support for and commitment to fulfilling its customers' needs in 2002 as well as identifying planned projects for 2003. This list contains a variety of applications developed or purchased to improve staff productivity, and several technology-only solutions to reduce overall operating costs. We believe the information technology solutions and services we provide are not only value-added tools that our internal customers benefit from by using them, but the public derives some benefit from them as well by virtue of being better informed about MoDOT and its mission.

Accomplishments

Permits Access via the Web

MoDOT's customers were connecting directly to a Mainframe system for requests to purchase special permits such as over-weight and over-dimension. This direct dial-in interface has been replaced with access via the World Wide Web. MoDOT's customers are being notified that January 1st is the cutover date for permit purchases to be accomplished through the Web.

Adaptive Enterprise Architecture

MoDOT Information Systems has embarked on an enterprise architecture project, following closely on the efforts of the statewide project that led to the Missouri Adaptive Enterprise Architecture. This project will develop a similar architecture for MoDOT at the agency level, producing a set of policies, principles, processes and governance whereby strategic decision making through the use of Information Technology is defined and carried out. These deliverables will define the structure upon which a Business Architecture, a Technology Architecture, and associated Life Cycle processes will be developed based upon the Zachman framework. The Business Architecture describes the various business objects (processes and data) and their relationships in progressively more detail. The Technology Architecture describes the various technology domains and their components, and the standards that will be adopted within each one. The Life Cycle processes keep the Enterprise Architecture vital, help ensure compliance, and will allow for Business Case Exceptions.

Transportation Management Systems (TMS)

Transportation Management Systems is an on-going project that was implemented in March 1999. TMS allows MoDOT to integrate geographically oriented transportation data from multiple sources such as bridge, pavement, safety, traffic monitoring/congestion, outdoor advertising (billboards), junkyards and travel ways.

TMS allows MoDOT staff to graphically view and analyze data to make better decisions concerning preservation and construction of transportation systems. TMS is based upon a common location referencing system that utilizes software to link graphical information to tabular information through the use of relational databases.

The State Traffic Accident Reporting System (STARS) was developed in conjunction with the Missouri State Highway Patrol (MSHP). The STARS system allows MSHP to enter accident data directly into MoDOT's Safety Management System. MSHP will have access to the transactional and analysis databases to meet their business needs and to create statistical reports.

The annual TRADAS processing program was developed to replace an external program. This allows actual truck volume counts to be incorporated into TMS for more accuracy as opposed to the previously used calculated counts.

A system was implemented for Adopt-A-Highway inventory and Work Zone Lane Closure that allows TMS users to view hourly traffic volumes. Users also now have the capability to view Digital Ortho Quarter Quadrangle (DOQQ) images in conjunction with TMS coverages to provide more accuracy in the display of geospatial data.

Approximately 50 reports have either been modified or created to enable users to do their business more effectively. Department of Revenue now has access to TMS data, particularly, the accident report images.

OPIS System – Bridge Design

Recognizing the great potential for reusing modular software developed in the Virtis project, MoDOT's Bridge Division has completed implementation of the OPIS bridge design software from AASHTO. OPIS allows Bridge Division engineers to design bridges utilizing the Load Rating Factor Design (LRFD) technique sanctioned by the Federal Highway Administration (FHWA).

Box Culvert Quantity Estimation

The Box Culvert Quantity Calculation program was implemented and entered production February 2002. This program speeds up the design effort for bridge design engineers by automating the calculation of concrete and steel to be used in building a single, double or triple box culvert. This program was developed for the World Wide Web using Visual Age for Java and is capable of stand-alone or network execution.

First Report of Injury Electronic Data Interchange

Development began in August 2001 on an application that enables the Risk Management district offices to electronically transmit First Report of Injury (FROI) Claims to the Department of Labor and Industrial Relations. This system was developed using Versata Logic Suite. It was moved to production status November 2002.

This system allows MoDOT's ten outlying districts to enter Workers Compensation claims on-line using an Internet web browser. The information is then imported into the MoDOT Risk Management system, and transmitted to the Department of Labor and Industrial Relations. Where it used to take several days to send paper forms through the mail, data is now entered once and passed to the required systems and agencies in seconds.

Electronic Communication Device Request System

A new Electronic Communication Device Request system has been implemented that tracks all internal cellular phone and pager requests, approvals, and reimbursements. The system stores carrier plan information as well, allowing the system administrator to match each new request with the best plan, and allowing supervisors to compare actual usage with the plan on a regular basis.

Indirect Construction Costs

MoDOT Information Systems designed and implemented an interface to SAM II Advantage for allocating indirect construction overhead costs to projects. The interface applies an indirect overhead rate to selected expenditures resulting in the creation of project charge documents. The MoDOT Controller's Office estimated that MoDOT is eligible for approximately ten million dollars annually in construction overhead cost reimbursement from the federal government.

Financial Data Mart

A new release to the Financial Data Mart was implemented. It provides more information on fixed assets. Additional releases/upgrades are planned to continue to provide business users with essential data and to implement data warehousing best practices. Other data mart modifications during 2002 were made to include phone billing and usage information, and to include final (Federal) billing information.

Selection of an ETL (Extract, Transform, Load) tool was made during 2002. Implementation is planned for early 2003. ETL tools are used to extract, cleanse, transform, and load data into target tables. Such tools replace time-consuming hand coding. Implementation of such a tool will allow MoDOT to respond faster to changes in automated systems and in user needs, reduce development time, and move toward standardized Data Warehouse and data integration environments.

Oracle Database Upgrades

The upgrade of Oracle to version 9i was completed in October 2002 and included the upgrade of 23 databases on 8 database servers as well as the upgrade of client software on 80 application servers and 2000 client workstations. The move was required to maintain vendor support but also provides increased functionality, especially in the area of support for large databases such as data warehouses.

Retirement Backdrop Plan

Enhancements to the legacy retirement system were implemented to reflect the changes of the new Retirement Backdrop Plan passed by the State Legislature last year.

Learning Management System (LMS)

LMS is an integrated learning system that lets MoDOT create an individualized training experience for learners. It is a centralized system to schedule, track, maintain, and report training information for all active employees. LMS provides a wide range of tracking and evaluation tools that help MoDOT align learning initiatives with business objectives. Training curriculum developed through LMS can be delivered on-line, or through real and virtual classrooms. The initial rollout to Employee Development and Human Resources personnel in the MoDOT headquarters office was completed in October and the rollout for district offices was completed during December.

Intelligent Transportation Systems (ITS)

Information Systems personnel have worked with other MoDOT personnel to design, implement, and support numerous components of MoDOT's ITS projects. Information Systems has provided IT assistance and support for the fiber optic network for Gateway Guide, the ITS in St. Louis, and KC Scout, the ITS in Kansas City. Gateway Guide in St. Louis is now providing snapshot traffic images to three St. Louis television stations, and camera images of major arteries are becoming available via the web. Work is progressing on real-time image streaming to replace the still images. The KC Scout Transportation Operations Center, the processing hub for ITS in Kansas City, has been completed in the District office.

Information Systems has also provided support for the Transportation Management Center in Springfield and the Branson TRIP web site.

Web Application Environment and MoDOT Web Site

MoDOT made some minor cosmetic changes to its web site in October, and a project is underway to revamp the site more thoroughly. The new site will for the first time incorporate portal technology into its design using IBM's acclaimed WebSphere product suite. Portals are independent areas of a web page where separate processing can occur, such as program execution, background searches, data entry, etc., independent of the activities in another portal on the page. The use of portals allows web users to understand and maneuver around a web site more easily because the portals can be individually tailored to function and respond as a user might expect.

To support web application development at MoDOT, Information Systems has standardized on a suite of products for the Java language. Rational Rose is the department's data modeling product; Versata Design Studio is the Java development

environment, and IBM's WebSphere product family is the portal and content management development environment as well as the Java and web application server run-time environment.

Client Server Encyclopedia

Client Server Encyclopedia, the repository for Advantage:Gen application models, has been implemented on a Unix platform for use by Information Systems' Applications Technologists. This conversion was completed in May 2002, eliminating the expense of running on the State Data Center mainframe for an immediate estimated cost savings of $25,000 - $30,000 per month.

Backup System Improvements

Unlike many services, backups are not typically needed until there is a problem. When there is a problem, having current backups to restore from becomes crucial. To accommodate this need MoDOT has installed two new servers, a second Tape Library system, and a Storage Area Network Director. These units have increased overall capacity and reduced the time to backup data, providing additional resources to address the ever-growing need for retention of data.

Service Consolidation

MoDOT recognized the opportunity to improve system-wide services, such as backup, storage provision and application processing, while saving significant expense, by more fully utilizing the capacity of the MoDOT Wide Area Network (WAN). Studies indicated the possibility for significant savings by consolidating server hardware from MoDOT District offices into the Headquarters location with no reduction in services. Service Consolidation has begun for MoDOT's Windows based operating systems. MoDOT is replacing 235 distributed servers with 96 servers, reducing overall operating and maintenance costs. Implementation is scheduled for completion during the first half of 2003.

Token Ring to Ethernet Conversion

All ten MoDOT District offices have been converted from a Token Ring topology to 100 Base T Ethernet. This upgrade replaced obsolete equipment, providing greater serviceability and higher network throughput. General headquarters is in the process of conversion and should be completed in the first half of 2003. Ethernet switching will enable future technologies such as IP telephony and Video Conferencing.

WAN Fiber Optic Replacement.

The communications project to implement Packet-Over-SONET interfaces in core Ethernet switches on the Wide Area Network was completed in early October. This

replaced obsolete equipment at the edges of the Wide Area Network and enabled automatic fail-over service from SONET to backup frame relay links, providing network redundancy, greater network throughput, better serviceability, and greater accessibility to central applications by district and remote office personnel.

PC Installs

In November MoDOT ordered new PCs from Dell Computer, Inc. to replace aging computers around the state. In a cost-savings move, the department utilized for the first time Dell's Custom Factory Integration service to have MoDOT's standard software configuration, asset tags, and other custom files applied at Dell's Austin, Texas factory instead of having Information Systems staff perform those tasks. The units were also direct-shipped from the factory to the ten District Offices and headquarters instead of shipping them to one location and having IS staff distribute them individually as was done in the past.

Planned Projects

Video Conferencing

MoDOT Information Systems completed its evaluation of video conferencing solutions this past year, and anticipates providing this service in the coming year. Video conferencing could save travel costs by providing a virtual meeting room as an alternative for individuals who would otherwise have to travel to meeting locations.

Regatta Environment Implementation

An IBM P690 Regatta server was purchased to meet MoDOT's increasing Unix processing and database needs. The first group of systems will be migrated to the new Regatta server in the last quarter of 2002 and the first quarter of 2003. Included in this group are AIX-based systems such as SiteManager, RiskMaster, Brass, Opis, Virtis, RW Parcel Acquisition, First Report of Injury, Financial interfaces, and HR interfaces. Additional systems and databases such as TMS, Fleet, Financials data mart, HR data mart, and Websphere will be moved to the Regatta server at a later date.

Transportation Management Systems (TMS)

Several enhancements are currently underway and will be implemented in 2003. These enhancements include new reports for the Bridge Maintenance and Bridge Divisions that will assist their staff in doing their jobs, changes to the National Bridge Inventory program to further automate the validation and submittal process, and adding a Sound Wall Inventory feature. In addition, the underlying geo-referencing system known as the Location Referencing System (LRS) is being rewritten to reduce maintenance costs, provide for or enable additional functionality and significantly reduce the time required for making updates to the GIS coverage within the system.

Fleet Management System

MoDOT's Fleet system was implemented in November of 1997 and has been instrumental in tracking specific information regarding MoDOT's fleet. Warranty, service, repair, inspection and usage information is entered into Fleet from locations across the state providing up to date information. The Office of Administration has embarked on an effort to consolidate the state equipment information into a central database to help the state better manage its resources. This will impact MoDOT's current Fleet system but to what extent is not known at this time. MoDOT is looking to web-enable its current Fleet system beginning in 2003.

Virtis System - Bridge Rating

MoDOT Bridge Division is gearing up for the upgrade of Virtis version 5.0. Virtis is the American Association of Highway and Transportation Officials' (AASHTO) software product for bridge load rating. IT features state-of-the-art graphical tools to speed preparation of data and application of the results. Virtis provides an integrated database where bridge rating inputs and outputs can be readily stored and re-used. Future plans call for Virtis rating data to be interfaced into the departments Transportation Management System.

Motor Carrier Systems Consolidation

In accordance with the Governor's directive, all Motor Carrier Systems will be consolidated under MoDOT by the summer of 2003. The business processes of the various functions of Motor Carrier Services were examined and documented in order to identify areas where overlapping functions could be combined or integrated into MoDOT's existing structure. At the completion of this task, a new set of functional requirements will be obtained and options for a combined system will be examined.

Materials Testing Indirect Overhead Interface

An interface to SAM II ADVANTAGE Financial will be built that applies an indirect overhead rate to contractor payments resulting in the creation of a project charge document. This request will allow the department to allocate material testing indirect costs to projects so that they can be federally reimbursed. It is estimated that this new interface will result in approximately six million dollars annually in federal reimbursement.

Fuel Card

MoDOT's General Services unit is implementing the use of credit cards for the purchase of gasoline for MoDOT vehicles. MoDOT's Information Systems is automating the payment process. Billing data will be transferred electronically from the vendor's website, validated, and combined with accounting information to create payment

vouchers that will be interfaced to SAM II ADVANTAGE Financial. Billing and usage information will be loaded into the Financial Data Mart to be used to validate transactions and for reporting purposes. A Web-based application will be developed to allow the MoDOT Controller's Office to update accounting information. Implementation of the fuel card is expected to save MoDOT approximately one million dollars a year in fuel costs.

Virtual Private Networking (VPN)

Virtual Private Network (VPN) connections are secure, private communication tunnels between two computers that support the VPN protocol. VPNs are generally implemented to allow remote users to "tunnel in" to a main facility by first accessing a nearby facility– often the user's Internet Service Provider—in order to save long distance charges. MoDOT has completed a trial project of setting up a VPN network for its remote users, and there appears to be an opportunity for savings. If funded, VPN connections through local ISP service providers could save money at remote access sites, and improve network performance where DSL and cable modem service is available.

Fax Tools Consolidation

In a preliminary study of expanding its centralized server-based faxing service, MoDOT may be able to save faxing and paper costs by merging installations of fax software solutions.

Homeland Security Network

MoDOT is participating with a few western states and Universities in a trial implementation of an inter-networked security messaging system that allows participants to share information on security-related events. The system went into a trial mode in July and was placed into production in September. As the system matures, more participants are expected to come online and new features are to be added.

Accumulated Demand

MoDOT continues to have a backlog of IT requests along with an increasing demand for new service. These requests come from all districts and functional units within MoDOT. Included in this backlog are requests for new software, updates to current software, requests for new hardware including PC desktops and laptops, and requests for new technology including palm-tops. The current estimated timeframe to complete the work represented by this backlog continues to range from four to six years at an estimated cost between 38 and 59 million dollars.

Addition of information technology continues to add to the necessity of upgrading the infrastructure. Adding more systems and constant infrastructure upgrades results in an ever higher workload for IS staff. Severe restrictions on headcount along with mandates to reduce totals spent on salaries places more work on an already overworked staff. It is estimated that IS staffing should be increased by five to fifteen percent to reduce

overtime and reliance on more expensive contract labor for non-project specific tasks and support.

Use of contracted consultants continues to rise as new projects are funded. Federal and State mandates must be met, and the associated automation changes must be made. Some cost-saving projects are being enabled through technology, and reliance on IS and IS staff will rise for the foreseeable future.

General Department Profile (2002)

Department Name		
Missouri Department of Transportation		
Street Address	City	
105 West Capitol Avenue	*Jefferson City*	*65102*
Main Phone Number		Website URL
751-2551	*526-2484*	*www.modot.state.mo.us*
Department Director		
Henry Hungerbeeler		
Number of FTE (entire department)	Approximate number of citizens served	
6400	*All Missouri*	
Agency Mission (brief statement)		
Taking care of and improving Missouri's transportation system.		

Department CIO and IT Division Profile (2002)

Department Name		
Information Systems		
Department CIO Name		
Lew Davison		
Street Address	City	Zip
105 West Capitol Avenue	*Jefferson City*	*65102*

CIO Phone Number	CIO Fax Number	E-Mail Address
526-2949	*751-2839*	Davisl@mail.modot.state.mo.us

CIO Membership in Professional Associations – Leadership Role Involvement (i.e., NASCIO – serve on architecture standards committee)

IT Division Name	Website URL
Information Systems	

Number IT FTE (located in central office)	
102	*32*
Total $$ value of FY03 IT requests submitted to OA Budget and Planning	
0	*0*

Security Officer Name	Phone No.	E-mail
Steve Derendinger	*522-1296*	Derens@mail.modot.state.mo.us
Privacy Officer Name	Phone No.	E-mail
ITAB Alternate Name	Phone No.	E-mail
Kim Potzmann	*526-2307*	Potzmk@mail.modot.state.mo.us
SDC Steering Committee Rep Name		E-mail
Tony Lutz	*526-1220*	Lutzt@mail.modot.state.mo.us

Department Technology Profile (2002)

Department Name	
Missouri Department of Transportation	
Main Processors (IBM 390 with MVS, UNIX AIX, UNIX Sun, etc.)	
Mainframe	*IBM 390/9121 with MVS*
PC Servers	*Dell and Compaq with Windows 2000*
Mid-range	*IBM RS6000 with AIX*
Networked	
Desktop (Windows XP, 3270, Linux, etc.)	
	Dell with Windows 2000 and Compaq with Windows NT
Dumb terminal	
Network Protocols (TCP/IP, SNA, IPX, etc.)	
SNA and TCP/IP	
Dialup and LAN	
MORENET	
Security Provisions (packages, anti-virus, filters)	
Network	*McAfee Netshield/Groupshield and TrendMicro*
Desktop	*McAfee VirusShield*
Internet	*PIX Firewall*
Magic	
Database Management Systems (DB2, Oracle, SQL, etc.)	
Oracle	
Development Tools (COBOL, CICS, Advantage:Gen, Websphere, .NET, etc.)	
COBOL, Advantage:Gen, Websphere, Versata	
E-Mail Packages (Exchange, Lotus Notes, etc.)	
Lotus Notes	
Encryption Packages (SSL, PGP, etc.)	
Version Control Packages (Source Safe, Panvalet, InterSource, etc.)	

Telecommunications (T1, Frame Relay, etc.)
Packet over SONET and Frame Relay
GIS (ArcView, MapInfo)
ArcView and ArcInfo

Office of the State Treasurer

Accomplishments

Collateral Tracking System

On July 1, 2002, the State Treasurer's Office officially implemented a new time deposit system, internally developed software used by the investment division. The new system is used to input, track, report, and most importantly protect, investments made by the State Treasurer's Office into Missouri Financial institutions. Time deposits, which resemble certificates of deposit, are made weekly into approved Missouri financial institutions. The software is utilized for inputting deposit data such as the rate of interest and maturity date, but is also utilized to generate trade confirmations, maturity notices, and for reporting and auditing purposes. All time deposits must be insured by acceptable collateral to protect the state against potential insolvency by a financial institution. Collateral pledged against the time deposits are input on the system and monitored daily to ensure the market value of collateral exceeds the amount on deposit. Collateral is priced daily through a third party pricing agreement with the Bloomberg Financial System. The time deposit system also incorporates numerous auditing and reporting functions, the most important of which prevents any one financial institution from receiving state deposits above what is prescribed by policy.

Planned Projects

Check Inquiry System

The Check Inquiry System provides State Treasurer's Office staff and state agencies the ability to check the status of a state issued check. The system reflects the paid, outstanding, cancelled and stop payment status of a check. STO currently contracts with Central Bank for this service. STO is developing the check inquiry system in-house using Visual Basic .NET and Microsoft SQL Server to upgrade and reduce the cost of the system to the State of Missouri agencies. The system will allow STO and other agencies immediate access via a browser to the status of a check issued by their agency. Previously agencies needed mainframe access to the system and/or relied on the STO for

the information. The majority of the development was completed in 2002 and is due for release to State of Missouri agencies in March of 2003.

Accumulated Demand

The demand for the development of in-house applications continues to grow in the State Treasurer's Office. In-house application solutions are being considered instead of packaged products that don't meet the needs and contracted services that are too high in cost.

General Department Profile (2002)

Department Name
Missouri State Treasurer's Office

Street Address		Zip
301 West High Street	*Jefferson City*	*65102*

Main Phone Number	Main Fax Number	Website URL
(573) 751-1360	*(573) 751-0343*	http://www.sto.state.mo.us

Department Director
Nancy Farmer, Treasurer; BK Perkins, Deputy Treasurer

Number of FTE (entire department)	Approximate number of citizens served
50	*Unknown*

Agency Mission (brief statement)
Utilize public resources to responsibly manage state funds, to promote economic growth and enhance the lives of Missourians.

Department CIO and IT Division Profile (2002)

Department Name		
Missouri State Treasurer's Office		
Department CIO Name		
Scott Peters		
Street Address		Zip
301 West High Street	*Jefferson City*	*65102*

CIO Phone Number	CIO Fax Number	E-Mail Address
(573) 751-8522	*(573) 526-5011*	*Scott_peters@mail.sto.state.mo.us*

CIO Membership in Professional Associations – Leadership Role Involvement (i.e., NASCIO – serve on architecture standards committee)
Member in Information Technology Advisory Board for the State of Missouri *Missouri Certified Project Manager*

IT Division Name	Website URL
Division of Information Technology	*NA*

Number IT FTE (located in central office)	Number IT FTE (located in field)
3	*0*
Total $$ value of FY03 IT requests submitted to OA Budget and Planning	Total $$ value of FY03 IT requests funded
$0	*NA*

Security Officer Name	Phone No.	E-mail
Kim Evers	*751-8771*	*Kim_evers@mail.sto.state.mo.us*
Privacy Officer Name	Phone No.	E-mail
NA	*NA*	*NA*
ITAB Alternate Name	Phone No.	E-mail
Daniel Moeller	*751-7280*	*Daniel_moeller@mail.sto.state.mo.us*
	Phone No.	E-mail
Scott Peters	*751-8522*	*Scott_peters@mail.sto.state.mo.us*

Department Technology Profile (2002)

Department Name	
Missouri State Treasurer's Office	
Main Processors (IBM 390 with MVS, UNIX AIX, UNIX Sun, etc.)	
Mainframe	
	Dell PowerEdge
Mid-range	
Networked	
Desktop (Windows XP, 3270, Linux, etc.)	
	Dell
Dumb terminal	
Network Protocols (TCP/IP, SNA, IPX, etc.)	
TCP/IP; SNA	
Internet Connections (DSL, Cable, Dialup, etc.)	
Fiber; Dialup	
MORENET	
Security Provisions (packages, anti-virus, filters)	
Network	*Norton Anti-virus*
Desktop	*Norton Anti-virus*
Internet	*Norton Anti-virus*
Help Desk Packages (Magic, GWI)	
NA	
Database Management Systems (DB2, Oracle, SQL, etc.)	
MS SQL Server	
MS Visual Basic; .NET	
E-Mail Packages (Exchange, Lotus Notes, etc.)	
Exchange	
Encryption Packages (SSL, PGP, etc.)	
SSL	

NA
Telecommunications (T1, Frame Relay, etc.)
Fiber
GIS (ArcView, MapInfo)
NA